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IN THE

Supreme Court of the United States

OCTOBER TERM, 1954

No. .....

BAUSCH & LOMB OPTICAL CO.,

Petitioner,

v.

DEAN A. LYON,

Respondent.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

TO THE HONORABLE THE CHIEF JUSTICE OF THE UNITED STATES AND THE ASSOCIATE JUSTICES OF THE SUPREME COURT OF THE UNITED STATES:

The petitioner above named prays that a writ of certiorari issue to the United States Court of Appeals for the Second Circuit to review the decision and judgment of that Court in this action.

In accordance with Rule 21 (3) (4) of this Court petitioner files herewith a certified copy of defendant-appellant's Appendix filed in the Court below (Vols. I and II) and plaintiff-appellee's Appendix filed in the Court below together with the proceedings in the Court below (Vol. III) and nine copies of each of said appendices.

Opinions of the Courts Below

The opinion of the Court of Appeals for the Second Circuit, dated June 20, 1955, affirmed a judgment holding valid and infringed all claims in suit (*i. e.*, 1, 2, 4, 5, 8 and 9) of plaintiff's patent for a Method For Coating Optical Elements. The opinion of the Court of Appeals appears in the Appendix to this petition at page 1a and is reported in 106 USPQ 1.

That Court's opinion, dated July 29, 1955, on the petition for rehearing filed by petitioner here (defendant-appellant below) denied the same except it held claims 1, 2, 4 and 5 invalid but otherwise affirmed the judgment as to claims 3, 8 and 9. The opinion on rehearing appears at page 20a of the Appendix to this petition and is reported in 106 USPQ 240.

The opinion of the District Court dated December 31, 1953 appears in Volume II D.A., at page 910a and is reported in 119 F. Supp. 42 and, together with the findings of fact, is also reported in 100 USPQ 100.

Statement of Grounds on Which Jurisdiction is Invoked

The grounds on which jurisdiction of this Court is invoked are that the United States Court of Appeals for the Second Circuit by its decision herein has decided important questions of federal law in a way in conflict with applicable decisions of this Court and in conflict with applicable decisions of other United States Courts of Appeals for other Circuits and with earlier decisions of its own involving the same basic principles of law.

The judgment of the Court of Appeals sought to be reviewed was dated and entered on June 20, 1955 and appears at page 18a in the Appendix to this petition.

The order on the petition for rehearing by the defendant-appellant was dated and entered July 29, 1955 and appears in the Appendix to this petition at page 21a. Plaintiff-appellee did not file a petition for rehearing under the leave granted to him by said order.

The jurisdiction of this Court is invoked under the provisions of 28 U. S. C., Section 1254 (1) and Section 2101 (c), and Section 1 (b) of Rule 19 of this Court.

Questions Presented for Review

1. Did the decisions of this Court and the conforming decisions of the lower courts, on the test of patentable invention, during the period of twenty-five years preceding the Patent Act of July 19, 1952, change "the classical test of invention" applied by the courts since *Hotchkiss* v. *Greenwood* (1850), 11 How. 248, and, if so, has the 1952 Act, Sec. 103, overruled and nullified such decisions by "restoring the law to what it was" before such decisions were rendered, so that plaintiff's patent, which the Court below found was "almost certain" to "have been held invalid" before the Act, has now been validated by the Act?

2. Can a patent as to which the Court of Appeals found "it is almost certain that the claims would have been held invalid" prior to the 1952 Act and which the Court held to be validated by the Act, *ex post facto* support an award of damages for infringement which occurred during such period of invalidity prior to the Act, in view of Sec. 5 of the Act which, in repealing the applicable sections of prior patent acts, provided that "Any rights or liabilities now existing under such sections or parts thereof shall not be affected by this repeal"?

3. Where the prior art taught, disclosed and used the process of heating the glass while depositing a vaporized metal in a vacuum (as found by the District Court and by the Court of Appeals) for the same purpose of cleaning the glass for intimate contact with coatings of metals, was it a new use and invention under Sec. 100 (b) and under Sec. 103 of the 1952 Act, to employ the same process with known and analogous materials (metal fluorides) to accomplish the same cleaning function and produce a known coated product, under the decisions of this Court, such as *Brown* v. *Piper et al.* (1875), 91 U. S. 37; *Paramount Publix Corp.* v. *American Tri-Ergon Corp.* (1935), 294 U. S. 464?

4. Can a successful and commercial practice of a process be later discarded and disregarded as an abandoned experiment because not brought "to light in the art" nor "urged for adoption" by widespread publication, or because that commercial use was of only limited or "small scale" volume, contrary to the uniform decisions of this Court, such as *Egbert* v. *Lippmann* (1881), 104 U. S. 333; *Corona Co.* v. *Dovan Corp.* (1928), 276 U. S. 358 and *Electric Storage Battery Co.* v. *Shimadzu* (1939), 307 U. S. 5?

Statutes Involved

Prior Statute, R. S. 4886, 35 U. S. C. 31, 1946 ed. Inventions Patentable:

> "Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof, or who has invented or discovered and asexually reproduced any distinct and new variety of plant, other than a tuber-propagated plant, not known or used by others in this country, before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country,

before his invention or discovery thereof or more than one year prior to his application, and not in public use or on sale in this country for more than one year prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law, and other due proceeding had, obtain a patent therefor." (R. S. sec. 4886; Mar. 3, 1897, ch. 391, sec. 1, 29 Stat. 692; May 23, 1930, ch. 312, sec. 1, 46 Stat. 376; Aug. 5, 1939, ch. 450, sec. 1, 53 Stat. 1212.)

1952 Patent Codification Act, 35 U. S. C. Sec. 100(b). Definitions—

"The term 'process' means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material."

Sec. 101. Inventions Patentable—

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title."

Sec. 102. Conditions for Patentability; Novelty and Loss of Right to Patent—

"A person shall be entitled to a patent unless—

"(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

"(b) the invention was patented or described in a printed publication in this or a foreign country or in

public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or

• • • •

"(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other."

Sec. 103. Conditions for Patentability; Non-obvious Subject Matter—

"A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made."

Sec. 252. Effect of Reissue—

"No reissued patent shall abridge or affect the right of any person or his successors in business who made, purchased or used prior to the grant of a reissue anything patented by the reissued patent, to continue the use of, or to sell to others to be used or sold, the specific thing so made, purchased or used, unless the making, using or selling of such thing infringes a valid claim of the reissued patent which was in the original

patent. The court before which such matter is in question may provide for the continued manufacture, use or sale of the thing made, purchased or used as specified, or for the manufacture, use or sale of which substantial preparation was made before the grant of the reissue, and it may also provide for the continued practice of any process patented by the reissue, practiced, or for the practice of which substantial preparation was made, prior to the grant of the reissue, to the extent and under such terms as the court deems equitable for the protection of investments made or business commenced before the grant of the reissue."

The foregoing Code Sections are parts of Section 1 of the Patent Act of July 19, 1952, Public Law 593, Chapter 950, 82 Congress, 2d Session. Sections 4(a), (e) and 5 of the Act are as follows:

Sec. 4. (a) "This Act shall take effect on January 1, 1953 and shall apply to all applications for patent filed on or after such date and to all patents granted on such applications. It shall apply to further proceedings on applications pending on such date and to patents granted on such applications except as otherwise provided. It shall apply to unexpired patents granted prior to such date except as otherwise provided."

Sec. 4. (e) "Nothing contained in Title 35, as enacted by section 1 hereof, shall operate to nullify any judicial finding prior to the effective date of this Act on the validity of any patent by a court of competent jurisdiction."

Sec. 5. "The sections or parts thereof of the Revised Statutes or Statutes at Large enumerated in the following schedule are hereby repealed. Any rights or liabilities now existing under such sections or parts thereof shall not be affected by this repeal." (Schedule including R. S. Sec. 4886)

Statement of the Case

The Petitioner and other manufacturers were engaged before the late war in the commercial production of lenses coated with light-transmitting films of molecular thickness, for reducing the reflection and wastage of light at the surface of incidence on the lens (Finding 5). Such films were applied in an evacuated container by heating and vaporizing the coating material so that it was condensed and deposited as a thin film on the lens surface (Vols. I and II, D. A. 270a, 845a, Deft's. Exh. D-52). It was known that a more tenacious and hard film was produced by heating the lens, before being coated in the vacuum (preheating) to vaporize and drive off surface impurities and thus clean it for intimate contact with the coating, and it was known that heating the coated lens (post-baking) improved the tenacity and ruggedness of the coating, substantially as recognized in plaintiff's patent specification, particularly as originally filed at the Patent Office (Vol. II, D. A. 552a, 559a).

It was known practice also in coating with such light-transmitting (reflection-reducing) films, as well as with opaque (light-reflecting) films, to heat the lens while being coated in the vacuum, for the same purpose of cleaning it, and this step had been described in printed publications and used openly in commercial production prior to plaintiff's alleged invention, as hereafter pointed out. This known step, however, is designated by plaintiff's specification as the invention of his patent, as hereafter referred to.

Plaintiff was employed as a technician by the Navy Department in January, 1941, to learn such coating technique and install it among the suppliers of optical elements for the armed services. He read the literature of the art, visited the plants of defendant and other manufacturers of coated optical elements (Vol. III, P. A. 2a; Vol. I, D. A. 528a-529a) and, as he stated in a published address at the

time (Vol. I, D. A. 531a) he "stumbled upon that *old idea* of heating the elements in a vacuum," as the slow but most intensive method of cleaning the lens glass to obtain an intimately contacting and tenacious film, to suit the severe usage of military field service. The Navy Department then required use of this technique by defendant and all suppliers of Government optics.

Plaintiff's application (Vol. II, D. A. 549a, 554a) filed by the Navy Department Nov. 17, 1942, disclosed the process as applicable to any "*suitable coating material*", for coating mirrors, lenses and the like, specifically disclosing both the metal fluorides which form light-transmitting coatings as well as the metal sulfides which form light-reflecting or opaque coatings. The patent application was repeatedly rejected by the Examiner on reference to several prior patents disclosing the identical process in use for applying light-reflecting, metallic films, to "silver" mirrors, and on reference to several other patents disclosing the application of light-transmitting films (metal fluorides) by evaporation in vacuum and heating the glass before the vacuum for the same cleaning purpose and heating the coated lens to improve the tenacity and hardness of the coating. The Examiner held that no invention was required to use the known "silvering" method of coating on hot glass and substitute a known light-transmitting material (metal fluoride) as the coating material. He held, in the alternative, that no invention was required to use the known process for depositing light-transmitting materials and to heat the glass in the vacuum, instead of heating it before and after the vacuum (Vol. II, D. A. 569a, 578a).

The claims were then restricted by amendment (Vol. II, D. A. 560a, 576a, 582a) to the known process of coating on hot glass, but in use with "inorganic salts" (claims 1, 2, 4 and 5) and more specifically with light-transmitting inorganic salts which include the metal fluorides (claims 3, 8 and 9). The claims were thus distinguished from the

prior patents; i.e., instead of claiming the use of metal in the old and known process, the claims claim the known and analogous coating materials (inorganic salts and metal fluorides) in that same process to make a known coated lens product (Cartwright patent 2,207,656, Vol. II, D. A. 781a). After persistent argument by the Government solicitors, and an "interview" with the Examiner, he withdrew the rejection of the claims but without any relevant or adequate explanation (Vol. II, D. A. 600a, 602a).

After the war, defendant continued the use of the accused process, both as required to supply the Government and its commercial production, without knowledge of any claim to patent rights. Plaintiff's patent was issued April 16, 1946, and this suit was begun May 6, 1949. It was tried without a jury in the District Court for the Western District of New York on July 8, 1952, at which time plaintiff was allowed to amend to include a claim for breach of confidential disclosure. Defendant denied any such breach and denied the validity of the patent on several grounds, but admitted infringement if the patent should be held valid.

Defendant relied in part on the prior patents cited by the examiner, supplemented by others of cumulative effect. In addition, defendant produced a patent to Cartwright et al., No. 2,207,656 (not before the Examiner), disclosing the coating of lenses with light-transmitting, reflection-reducing films of metal fluorides and teaching the application of such coatings "in the manner now generally well known in the silvering of mirrors and the like," (Vol. II, D. A. 782a, col. 1, line 21) thus suggesting the method of the Examiner's patent citations in which the glass is heated during coating with silver in the vacuum. It was proven that this silvering process had been in use for years by Sylvania Electric Products, Inc. in the quantity manufacture of mirror surfaces on lamp bulbs (Vol. I, D. A. 475a-523a).

The District Court distinguished such patents on the ground that while some of them disclosed the deposit of metal films on hot glass, other patents disclosed the deposit of metal salts on unheated glass and that it required invention to see that the glass could be heated and cleaned in the same way and for the same purpose when depositing metal salts (Vol. II, D. A. 914a). The Court of Appeals adopted the same view, but mistakenly held that the invention disclosed by plaintiff's specification is limited to coating with light-transmitting materials and thus "widely diverged" from the prior patents.

In addition, defendant produced an article (not before the Examiner) published in a scientific magazine in 1931 by Cartwright, the patentee, in which (Vol. II, D. A. 743a) he described the identical process of coating on hot glass, for applying a class of materials including not only metals but also the light-transmitting, reflection-reducing metal salts of plaintiff's patent ("the alkali halides" including "fluorite" or calcium fluoride). Plaintiff so testified (Vol. I, D. A. 68a-70a) and that he had previously read this article (Vol. I, D. A. 67a) which described the use of the process with such materials, in the usual exemplary way, by describing the deposit of one of them (silver) on glass heated in the vacuum to clean it during coating (Vol. II, D. A. 746a). The District Court found that this publication described the identical process (Vol. II, D. A. 915a) but rejected it because describing its application to only one of the disclosed materials and reached the conclusion that it was not obvious to one skilled in the art, that the process could be employed to deposit any of the other materials (including metal fluorides), which the article expressly designated for use in the same process. The Court of Appeals avoided any reference to this publication, although it was briefed and argued as a complete anticipation, both on the appeal and in the Petition for Rehearing.

Both Courts found that Dr. Cartwright while an instructor in the physics department at M. I. T. in 1939-1940, had

followed up his previous work and publications on coatings, by carrying on a limited commercial business of coating lenses (Vol. II, D. A. 916a-917a; Appendix 8a-9a) in the course of which he employed the identical process claimed in plaintiff's patent, as a side line "in a small scale commercial business of coating optical elements for persons and corporations who had become familiar with his work" (Vol. II, D. A. 939a-940a) with unrestricted disclosures to others (Vol. II, D. A. 916a, 920a-921a) including Dr. Hewlett* of the General Electric Company (Vol. II, 942a) and that as a result of the notoriety of his work in demonstrating the practical utility of such films, Cartwright was so besieged with orders for coatings as to necessitate the hiring of an assistant to fill them (Vol. II, D. A. 916a, 917a, 939a-940a).

But the Court of Appeals, notwithstanding such findings, adopted the conclusions of the District Court that Cartwright's use of the process, "in his commercial work, had convinced him that it was inferior in results" to other methods of coatings; that he failed to "properly evaluate" the patented method or to conclude that it was "the best method for obtaining hard and rugged coatings"; that Cartwright's commercial user was only on a "small scale" and "sporadic" and that he "did not bring it to light in the art, nor urge its adoption" (Vol. II, D. A. 919a, 916a, 939a-942a). The Court of Appeals, adopting such reasoning, concluded that Cartwright's work was not a completed discovery and reduction to practice, nor prior knowledge

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* Both Courts found that Dr. Hewlett of the research staff of the General Electric Company, corresponded with Dr. Cartwright and carried on a parallel practice of the claimed invention (Vol. II, D. A. 920a-921a, 942a). Hewlett, having reduced the method to practice and evaluated it, concluded that it was an unnecessary refinement and expense for cover glasses of electrical meters and decided for that reason not to put it in production (Vol. I, D. A. 357a, 367a-368a, 374a-375a).

and use, nor public use, but only a discovery which was abandoned "as soon as it emerged from the stage of experiment" (App. 9a-10a).

The judgment of District Court was entered January 25, 1954, holding the claims in suit, Nos. 1 to 5, inclusive, and 8 and 9, valid and infringed and ordering an injunction and an accounting, but dismissing the claim of breach of confidential disclosure. The question of the effect of the 1952 Patent Act was not raised nor decided in the District Court. Only the defendant appealed.

In the Court of Appeals, it was not contended that the 1952 Act, Sec. 103, had changed the decisional law as to the test of invention. In fact, plaintiff's brief cited and relied on the prior decision of this same Court of Appeals in *Channel Master Corp.* v. *Video Television Inc.* (E. D. N. Y., 1953), 117 F. Supp. 812, 815, aff'd 209 F. 2d 511 (C. A. 2, 1953), to the effect that the Act, Sec. 103, did not change the law. That question was first injected into the case at bar by that Court at the hearing on appeal and in its opinion that the decisions of this Court in the twenty-five years before the Act, changed the decisional law and that the Act, by "restoring the law to what it was," now again authorizes some vaguely greater liberality for the test of invention than was applied in such decisions (Appendix, p. 12a). In pursuit of that view, the Court of Appeals brushed aside or ignored the proofs of lack of novelty and invention (Sec. 103) and failed to apply the statutory defenses (Secs. 101, 102).

The opinion of the Court of Appeals, filed June 20, 1955, thus affirmed the judgment of the District Court, holding all of the claims in suit valid and infringed. The defendant filed a Petition for Rehearing on July 11, 1955, within the time therefor as extended by the Court. In its decision on the rehearing, the Court modified its opinion, holding claims 1, 2, 4 and 5 invalid for lack of disclosure. This petition for a writ of certiorari is timely filed.

Federal Jurisdiction of the District Court

This is a civil action under the Acts of Congress relating to patents and the jurisdiction of the Court of first instance is based upon 28 U. S. C. 1338 (a) and 1400 (b).

Reasons and Argument

Question 1. The decision below has decided an important federal question with respect to whether or not the Patent Act of 1952, which took effect on January 1, 1953, effected a change in the application of the standard of invention enunciated and applied by this Court and by the lower Courts in conformity therewith. The opinion below has decided this question in a way that is in conflict with the provisions of the Act and the intent of Congress, and is in direct conflict with the applicable decisions of Courts of Appeals in other Circuits involving the same question.

The Court of Appeals recognized that the Act, Sec. 103, by prescribing the test of obviousness to a person having ordinary skill in the art, merely enacted the classical test of the decisional law since *Hotchkiss* v. *Greenwood*. Thus the Court below said:

> "* * * § 103 only restores the original gloss, substantially in ipsissimis verbis; which has never been overruled; but on the contrary for seventy or eighty years had continued to be regarded as authoritative."

Such was the law as interpreted and applied in the decisions of this Court, during the twenty-five years before the Act, which the Court of Appeals has criticized as changing the law. But the Courts of Appeals of the other Circuits have held, on the contrary, that such decisions of this Court did not change the test or standard of invention but only required a more strict determination of what would have been obvious to one of ordinary skill in the

art; that such decisions of this Court have merely reaffirmed what this Court said long ago in *Atlantic Works* v. *Brady* (1882), 107 U. S. 192, 200. Even in *Cuno Engineering Corp.* v. *Automatic Devices Corporation,* 314 U. S. 84, sometimes construed as requiring the most strict application of the standard, this Court stated its adherence to the principle of *Hotchkiss* v. *Greenwood* and any extreme interpretation of the expression "flash of creative genius" in the *Cuno* decision is unwarranted and has been guarded against in the second sentence of Section 103.*

> *Pacific Contact Laboratories* v. *Solex Laboratories,* 209 F. 2d 529, 533 (C. A. 9, 1953), cert. den. 348 U. S. 816.

This Court has said that the standard of patentability is a Constitutional standard. *Great Atlantic & Pacific Tea Co.* v. *Supermarket Equipment Corp.* (1950), 340 U. S. 147, 154. In requiring a strict application, this Court was not deviating from, but reaffirming the Constitutional intent which is binding upon Congress.

> *Avery* v. *Ever Ready Label Corp.,* 104 F. Supp. 913 (D. C. N. J., 1952).

The 1952 Act, Sec. 103, so far as here pertinent (first sentence) contains no provision in reference to the standard of invention beyond the bare enactment of the classical test of obviousness. It is bare of any support for any inference that Congress disapproved the criticized decisions of this Court and such fact supports the conclusion that if Congress meant so much, it would not have said so little.

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* Similar expressions, *i. e.,* "inventive genius", "intuitive genius", and the like, had long been used by the Supreme Court. *Reckendorfer* v. *Faber* (1875), 92 U. S. 347, 357; *Smith* v. *Whitman Saddle Co.* (1893), 148 U. S. 674, 681; *Potts* v. *Creager* (1895), 155 U. S. 597, 607; *Concrete Appliances Co.* v. *Gomery* (1925), 269 U. S. 177, 185; *Mantle Lamp Co.* v. *Aluminum Products Co.* (1937), 301 U. S. 544, 546.

The legislative history of the Act, furthermore, plainly establishes that it was not the intent of Congress to overrule the decisions of this Court. The Reports of the Senate and House Committees in reporting the Bill have been quoted and considered at length in many decisions uniformly holding the above conclusion, such as the following:

Stanley Works v. *Rockwell Mfg. Co.*, 203 F. 2d 846 (C. A. 3, 1953), cert. den. 346 U. S. 818;
General Motors Corp. v. *Estate Stove Co.*, 203 F. 2d 912 (C. A. 6, 1953), cert. den. 346 U. S. 822;
Joseph Bancroft & Sons Co. v. *Brewster Finishing Co.*, 113 F. Supp. 714, 721 (D. C. N. J., 1953), aff'd. 210 F. 2d 677;
New Wrinkle, Inc. v. *Watson*, 204 F. 2d 35, 37 (C. A. D. C., 1953) cert. den. 346 U. S. 820;
In re O'Keefe, 202 F. 2d 767, 771 (C. C. P. A., 1953).

The Court of Appeals said in reference to decisions that have passed upon the question whether the Act changed the standard of invention as previously defined by this Court, "so far as we have found none of them has held that § 103 did not change the standard of invention." The fact is, on the contrary, that this same Court had previously affirmed, *per curiam*, a decision by Judge Inch of the Eastern District of New York, specifically holding that the Act did not change the standard of invention.

Channel Master Corp. v. *Video Television, Inc.*, 117 F. Supp. 812, 815 (D. C. E. D. N. Y., 1953), aff'd. 209 F. 2d 511 (C. A. 2, 1953).

It has been uniformly so held in the other Circuits and no decision has been found to the contrary except the decision below in this case:

Wasserman v. *Burgess & Blacher Co.*, 217 F. 2d 402 (C. A. 1, 1954);

Stanley Works v. *Rockwell Mfg. Co.*, 203 F. 2d 846 (C. A. 3, 1953), cert. den. 346 U. S. 818;
Joseph Bancroft & Sons Co. v. *Brewster Finishing Co.*, 113 F. Supp. 714, 721 (D. C. N. J., 1953), aff'd. 210 F. 2d 677;
Interstate Rubber Products Corp., et al. v. *Radiator Co. et al.*, 214 F. 2d 546 (C. A. 4, 1954);
Fritz W. Glitsch & Sons v. *Wyatt Metal & Boiler Works*, 106 USPQ 162, 164-165 (C. A. 5, 1955);
General Motors Corp. v. *Estate Stove Co.*, 203 F. 2d 912 (C. A. 6, 1953), cert. den. 346 U. S. 822;
Pacific Contact Laboratories v. *Solex Laboratories*, 209 F. 2d 529 (C. A. 9, 1953), cert. den. 348 U. S. 816;
New Wrinkle, Inc. v. *Watson*, 204 F. 2d 35, 37 (C. A. D. C., 1953), cert. den. 346 U. S. 820;
In re O'Keefe, 202 F. 2d 767, 771 (C. C. P. A., 1953);
Thys Co. v. *Oeste*, 111 F. Supp. 665, 673 (D. C. N. D. Cal. N. D., 1953, aff'd. 219 F. 2d 131);
Modern Art Printing Co. v. *Skeels*, 123 F. Supp. 426, 432 (D. C. D. N. J., 1954);
DeBurgh v. *Kindel Furniture Co.*, 125 F. Supp. 468, 474 (D. C. W. D. Mich. S. D., 1954).

In enacting the test of invention as it had been defined by the decisions of this Court, and without more, it is plain that Congress did not intend to overrule the decisions of this Court, but, on the contrary, to confirm them.

In the pursuit of its contrary version and in view of the lack of novelty or invention, the Court of Appeals was led inescapably to the conclusion that the patent would have been held invalid by this Court, stating: "it must be owned that, had the case come up for decision within twenty, or perhaps, twenty-five, years before the Act of 1952 went into effect on January 1, 1953, it is almost certain that the

claims would have been held invalid" (Appendix 11a). *It was thus the opinion of the Court below that, but for the Act and its version thereof as overruling the decisions of this Court during those twenty to twenty-five years, the patent would be invalid under those decisions of this Court.*

The decision sought to be reviewed was turned on the subject of the proper standard of invention, the most important question of patent law. The decisions cited above show that the Courts of and in other Circuits are uniformly applying the standard of invention of the Act as defined and applied by the decisions of this Court in the previous twenty-five years. The decision below, after stating that the "authoritative" and "original gloss" of *Hotchkiss* v. *Greenwood* is embodied in Section 103 of the Act, implicitly holds that the later applications of this gloss by this and other Courts have been "indefinite" "but indubitably stricter" than the test of invention defined in Section 103; have "obscured [that gloss] by a series of later comments whose upshot is at best hazy"; and have been "too amorphous" to provide any assurance the public might have drawn from earlier decisions—i. e., before the effective date of the 1952 Act (Appendix 11a, 15a).

This creates confusion of the first order for there is nothing in the Act itself nor in the legislative history that explicitly or implicitly overrules the decisional law with respect to the standard of invention or its application from the time of *Hotchkiss* v. *Greenwood* to the effective date of the Act.

In any event the opinion below is in direct conflict with another decision of the same Court and is in direct conflict with other Circuits as to whether the 1952 Act is to be applied in accordance with the decisions of this Court of the last twenty-five years or in accordance with some undefined but less strict application of the standard of invention applied twenty-five years or more before the 1952

Act by some of the Courts but repeatedly condemned by this Court as early as 1882 in *Atlantic Works* v. *Brady, supra,* and as recently as 1950 in the *A. & P.* case, *supra.*

Question 2. The decision sought to be reviewed is in further confusion and conflict in its award of damages for infringement during the period before the 1952 Act when the Court concluded the patent would have been held invalid. Defendant relies on the self-evident proposition that there can be no infringement of an invalid patent and that it was necessary for the Court below to either find that the patent was valid before the Act, or else deny such damages, to avoid *ex post facto* enforcement of the patent, for such is not favored in the eyes of the law.

Defendant contends that such *ex post facto* enforcement is expressly prohibited by Sec. 5 of the Act which, in repealing sections of the prior Statutes, provided:

> "Any rights or liabilities now existing under such sections or parts thereof shall not be affected by this repeal."

Defendant contends also that any such *ex post facto* enforcement is inconsistent with the principle of intervening rights under reissued patents as now enacted in Sec. 252 of the Act.

The Court below raised this issue for the first time in its opinion and resolved it without having the benefit of a full briefing and argument.

Question 3. Question numbered 3 is directly related to the first question and necessarily should be considered along with question numbered 1 because the proper application of the standard of patentability and invention under the 1952 Act is the underlying basis for a proper decision of Question 3.

The identical steps of the patented process of heating glass while depositing a vaporized material in a vacuum for the same purpose of cleaning the glass for intimate contact with coatings of metals were known and used. Both Courts below found that several prior patents, publications and uses disclosed the same process of coating on hot glass with light-reflecting metals and also that several other patents disclosed the same process of coating with plaintiff's light-transmitting metal salts except for deposit on cold glass.

It was the Patent Office Examiner's considered and repeated judgments, in view of such patents, that it was obvious to one skilled in the art to coat hot glass with metal salts, notwithstanding his unexplained allowance of the claims at the insistence of the plaintiff's Navy Department solicitors. The Examiner rejected claims to the same process in the application of the Eastman Company employee, Beggs, until the issue of plaintiff's patent necessitated an interference (Vol. II, D. A. 644a, 648a, 651a, 655a). He rejected claims to the same process in the application of Osterberg *et al.* and the rejection was affirmed by the Board of Appeals (Vol. II, D. A. 872a, 890a). Of these several applicants, only the plaintiff succeeded in overcoming the Patent Office resistance.

The Court of Appeals misconstrued plaintiff's specification as "only for a 'light-transmitting optical' element" (Appendix 4a). At the rehearing, it was pointed out, on the contrary, that the plaintiff's specifications disclosed the use of the process with any "suitable coating material" including opaque, light-reflecting materials (the metal sulfides). As a result, the Court invalidated the claims not limited to light-transmitting coatings (claims 1, 2, 4 and 5) for lack of adequate disclosure. But the more compelling reasons for invalidating the claims were the disclosure by the prior patents and publications of coating on hot glass, and the indefiniteness and over-claiming of plaintiff's claims at the point of novelty, rather than the lack of disclosure relied on by the Court.

"• • • Cowles has no right to claim the feature of incombustibility as his invention, since nothing is better settled in this court than that the application of an old process to a new and analogous purpose does not involve invention, even if the new result had not before been contemplated." *Ansonia Brass & Copper Co.* v. *Electrical Supply Co.*, 144 U. S. 11 (1892), citing to the same effect *Pennsylvania R. Co.* v. *Locomotive Engine & S. T. Co.* (1884), 110 U. S. 490, 494 and many other decisions.

The adaptation of an old process to a new use does not, under the decisions of this Court, amount to invention. *Brown* v. *Piper, et al.* (1875), 91 U. S. 37; *Paramount Publix Corp.* v. *American Tri-Ergon Corp.* (1935), 294 U. S. 464; *General Electric Co.* v. *Jewel Co.*, 326 U. S. 242, 247 (1945). The net result of the opinion and the invalidating of the broad claims on rehearing clearly exposes the conflict of the decision by the Court of Appeals with the foregoing decisions of this Court with respect to invention in the remaining claims.

The District Court conceded that the 1931 publication of Cartwright disclosed the same process, including heating of the glass while being coated in the vacuum, as in plaintiff's patent. The only attempted distinction was that, in describing the use of the process, reference was made in an exemplary way to the metal, silver, as one of the class of coating materials disclosed by the publication for use in the process. The disclosed materials included those of plaintiff's patent and the Court held that it was not obvious to one skilled in the art that the glass could be cleaned in the same way when applying any of the other materials disclosed for use in the process. *It is impossible to understand how a contention so trivial could be seriously advanced as supporting a patent monopoly,* in the face of the defense of prior publication, before the plaintiff's invention and more than a year before his patent application, as provided in Sec. 102 (a) and (b).

The Court of Appeals avoided any reference to this publication, although it was urged on appeal and in the petition for rehearing.

Question 4. The decisions of the courts below, in failing to apply the rules of law applicable to the findings of fact, are in confusing conflict with the statutory and decisional law.

Under Sec. 101 of the Act, the claimed subject matter must have been "new" at the time of plaintiff's alleged invention. Under Sec. 102 (a), it must not have been "known or used" by others, or "patented or described in a printed publication" before the alleged invention. It has sometimes been contended that "known" should be taken to mean publicly known, but that has not become the law. It has not been contended that "used" means publicly used, because that is the additional provision of Sec. 102 (b).

Under Sec. 102 (b), it must not have been "patented or described in a printed publication" or "in public use or on sale" more than one year prior to the date of application for the patent.

These provisions of Secs. 101 and 102 continue in the same terms and do not purport to change the prior Statute, R. S. 4886, as held by this same Court of Appeals in the *Channel Master* case, *supra*.

The courts below failed to apply these rules of law to their concurrent findings as to the prior use by Cartwright.

The District Court found (Vol. II, D. A. 939a, 940a, Findings 27-29, 31) and repeatedly stated in its opinion (Vol. II, D. A. 915a-917a) that Cartwright knew and used the claimed invention in 1939, reduced it to practice successfully, used and disclosed it to others without secrecy and used it in the commercial production of coated lenses for profit. And the District Court said, "These admissions pose important questions, i. e., whether Cartwright

properly estimated the value of heating in the vacuum * * * whether he brought it to light in the art and urged its adoption." But these were not the questions required by the statute and the Court completely ignored the above statutory requirements as defined by the decisions of this Court.

The Court of Appeals confirmed the findings of the District Court and stated even more specifically that the evidence proved "beyond cavil that Cartwright did conceive that to coat the glass in a vacuum, while heated, made the coating 'very much harder,' but it also shows not only that he had practiced it, but that he considered * * * having it patented." Furthermore, that he disclosed such practice to his sponsor, Research Corporation, and disclosed it unrestrictedly to Dr. Hewlett of the General Electric Co. and that he used it in the coating of many lenses in a commercial business yielding an income as high as $3,000 a year. The Court further concluded that this was a public use of the claimed invention from 1939 on. But the Court then agreed with the conclusion of the District Court, that since Cartwright did not eventually prefer such method to that of heating the glass before or after coating, nor take steps to bring "it to light in the art" he "abandoned his discovery as soon as it emerged from the stage of experiment" (Vol. II, D. A. 923a, 942a; Appendix 9a).

Such a conclusion by the Court of Appeals is not only in flat contradiction of its own findings of fact; it is in direct contravention of the above statutory defenses, of the decisions of this Court, and of its own prior decisions and those of the other Courts of Appeal.

One defect is the failure to observe the distinction between an abandoned experiment and a completed discovery which was elaborated by this Court in Corona Co. v. *Dovan Corp.* (1928), 276 U. S. 358. In that case the Weiss patent was held invalid because the invention had been known to and used by Kratz in the company laboratory, although it was not published nor brought "to light in the art" until

after the invention by the patentee Weiss. This Court said of Kratz's laboratory work (pp. 382, 384):

> "• • • what he did at Norwalk, supported by • • • the indubitable records that are not challenged, leaves no doubt in our minds that he did discover in 1916 the strength of D.P.G. as an accelerator as compared with the then known accelerators, and that he then demonstrated it by a reduction of it to practice in production of cured or vulcanized rubber.
>
> "This constitutes priority in this case. It was not followed by commercial use thereafter, because of the then cost of D.P.G. But this patent is for the mere discovery and application in the making of rubber of a particular accelerator. It was the fact that it would work with great activity as an accelerator that was the discovery, and that was all, and the necessary reduction to use is shown by instances making clear that it did so work, and was a completed discovery. • • •
>
> "It is a mistake to assume that reduction to use must necessarily be a commercial use. If Kratz discovered and completed, as we are convinced that he did, the first use of D.P.G. as an accelerator • • • he does not lose his right to use this discovery • • • because he does not subsequently sell the rubber thus vulcanized, or use his discovery in trade, or does not apply for a patent for it. It is not an abandoned experiment because he confines his use of the rubber thus produced to his laboratory or to his lecture room."

The facts of the present case are stronger for the defendant than those of the *Corona* case for Kratz, because when Cartwright's discovery "emerged from the stage of experiment", as a completed discovery, it was immediately employed in several years of commercial production. The attempted distinction by the Court of Appeals that "the tests of Kratz" were not " 'abandoned laboratory experiments' ", is completely irrelevant to the present facts.

The well known text, Patentability and Validity by *Rivise & Caesar (The Michie Co., Charlottesville, Va., 1936)*, states at Sec. 58, page 90:

> "A careful distinction must be maintained between abandoned experiments and abandoned inventions. As has already been stated and illustrated, a successful invention cannot be defeated by prior experiments which were abandoned because unsuccessful. *Abandoned inventions, on the other hand, are just as effective as references against later developments as if they had never been abandoned.*" (Italics added)

In *Buser* v. *Novelty Tufting Machine Co.*, 151 Fed. 478, 493 (C. A. 6, 1907), cert. den. 210 U. S. 432, the Court said:

> "If, then, an alleged invention is in fact an invention, no subsequent abandonment of it can be said to be an abandoned experiment. At most, it is an abandoned invention. But an invention that has been abandoned is as much an anticipation, and to as great an extent negatives novelty, as an invention that has not been abandoned."

A further defect is that in discarding the prior user of Cartwright, the decisions of both Courts are in head-on conflict with the above statutory defenses of prior knowledge and use and public use and sale. Commercial use, or use on a continuous or large scale, or any use at all is immaterial.

> "If the invention is perfected, and put into actual use by the first and original inventor, it is of no consequence, whether the invention is extensively known or used, or whether the knowledge or use thereof is limited to a few persons, or even to the first inventor himself." *Reed* v. *Cutter, et al.*, 20 Fed. Cas. 435, 437 (C. C. D. Mass., 1841).

> "We do not understand the Circuit Court to have said that the omission of Conner to try the value of

his safe by proper tests would deprive it of its priority; nor his omission to bring it into public use. He might have omitted both, and also abandoned its use, and been ignorant of the extent of its value; yet, if it was the same with Fitzgerald's, the latter would not upon such grounds be entitled to a patent." *Gayler, et al.* v. *Wilder* (1850), 10 How. 477, 498.

"The rule undoubtedly is that a prior use, in order to negative novelty in a patent, must be something more than an accidental or casual one. It need not have been persisted in, and the thing produced need not have gone into commercial use; but at least the discovery must have gotten beyond the experimental stage and have become complete, and the inventor must have understood and appreciated that it was capable of producing the results sought to be accomplished." *American Stainless Steel Co.* v. *Rustless Iron Corp.*, 71 F. 2d 404, 407 (C. A. 4, 1934).

"Appellants rely on Corona Cord Tire Co. v. Dovan Corp. * * * that the reduction to practice of an invention can be completed by production of the article and the testing of it by an inexact practical test showing its operative character to a man skilled in the art, and of the further proposition that the invention need not be followed by commercialization to establish its completion, and that no abandonment can be presumed merely from the lack of commercialization. With those principles we are in complete accord." *Minnesota Mining & Mfg. Co.* v. *Van Cleef,* 139 F. 2d 550, 555-6 (C. A. 7, 1943).

To the same effect, see:

Standard Sanitary Mfg. Co. v. *Iron City S. Mfg. Co.*, 222 Fed. 671, 678 (C. A. 3, 1915);
St. John v. *Schulze,* 47 F. 2d 798, 802 (C. C. P. A., 1931).

A *single prior use,* not proven secret, is a bar to any later inventor:

> "The prior knowledge and use by a single person is sufficient. The number is immaterial." *Coffin* v. *Ogden,* 18 Wall. 120, 124.
>
> "The law is clearly established that a single prior public use for more than two years prior to the application for the patent makes the patent void." *Toch* v. *Zibell, etc.,* 231 Fed. 711, 716 (C. A. 2, 1916) (citing *Egbert* v. *Lippmann,* 104 U. S. 336 and *Hall* v. *Macneale,* 107 U. S. 90).

In *Grasselli Chemical Co.* v. *National Aniline & Chemical Co.,* 26 F. 2d 305, 309 (C. A. 2, 1928), the Court by Judge Hand said:

> "Once the invention has been embodied in goods which are put in public use it becomes impossible for a later inventor to secure a patent."

Publication of the discovery, or steps to bring "it to light in the art", or "urge its adoption" are not required by the statute. In *Gillman* v. *Stern,* 114 F. 2d 28, 31 (C. A. 2, 1940), cert. den. 311 U. S. 718, in distinguishing between "a public user which does not inform the public" and "a secret user", the court by Judge Hand said:

> "* * * it was irrelevant whether the use informed the public so that they could profit by it."

In *Rosaire* v. *Baroid Sales Division, National Lead Co.,* 218 F. 2d 72, 75 (C. A. 5, 1955), cert. den. 349 U. S. 916, the court said:

> "* * * no case we have found requires a holding that, under the circumstances that attended the work of Teplitz, the fact of public knowledge must be shown before it can be urged to invalidate a subsequent patent." (citing the *Corona* case)

After Cartwright's prior knowledge and use and public use before plaintiff's invention and more than a year before plaintiff's application, there was no authority in law for the issue of a patent to plaintiff.

Conclusion

The decision sought to be reviewed places on the act and its standard of invention an interpretation which challenges and is in expressed conflict with the decisions of this Court, with the interpretation of the act by the other Courts of Appeal and with the interpretation in its own earlier decision.

Such conflict is created by validating the patent on reasoning which flies in the face of the several statutory defenses and their settled application in the decisions of this Court and of the same and other Courts of Appeal.

Only an authoritative decision by this Court can clear up such conflict and confusion in the basic principles of the patent laws.

Respectfully submitted,

EDWARD H. CUMPSTON,
711 Wilder Bldg.,
Rochester 14, N. Y.
Attorney for Petitioner.

JOHN N. COOPER,
233 Broadway,
New York 7, N. Y.

G. A. ELLESTAD,
Rochester 2, N. Y.

Of Counsel.

September 9, 1955.

APPENDIX

[Volume III 304a]

United States Court of Appeals

FOR THE SECOND CIRCUIT.

No. 216 October Term, 1954.

Argued April 6, 1955. Decided June 20, 1955

Docket No. 23345

DEAN A. LYON,

Plaintiff-Appellee,

v.

BAUSCH & LOMB OPTICAL CO.,

Defendant-Appellant.

Before:

L. Hand, Swan and Hincks, Circuit Judges.

On appeal from a judgment for the plaintiff of the District Court for the Western District of New York (Burke, J., presiding), in an action for the infringement of patent No. 2,398,382, granted to the plaintiff on April 16, 1946.

Edward H. Cumpston (G. A. Ellestad on the brief) for the appellant.

John W. Malley (C. Willard Hayes and B. E. Shlesinger on the brief) for the appellee.

L. HAND, Circuit Judge:

This is an appeal from a judgment of the District Court for the Western District of New York (Burke, J., presiding), sustaining the validity of Patent No. 2,398,382, granted to the plaintiff, Lyon, on April 16, 1946, upon an application [Volume III 305a] filed November 17, 1942. Of the nine claims all but 6 and 7 are in suit; the judgment held all seven valid, and the defendant concedes infringement. Judge Burke, in a long and careful opinion (119 Fed. Sup. 42), has stated the evidence in such detail that we may, as we shall, assume familiarity with it in our discussion of the issues involved.

The defendant first challenges the sufficiency of the specifications to support the claims. Throughout the specifications the "coating" to be vaporized is described only as a "suitable coating * * * such as metallic fluoride, metallic sulphide, oxide or the like" (page 1, col. 2, lines 26-28), or "mixtures" of these (page 2, col. 1, lines 26-28). The first five claims speak of "a stable, water insoluble, evaporated inorganic salt," and of the last two claims in suit number eight is for a "metallic fluoride" and number nine for "magnesium fluoride." The defendant complains that "suitable coatings" is too vague a description, even when accompanied, as the phrase was, by the specific substances mentioned. Considering the kind of coatings that the art had been using, an acquaintance with which the applicant might impute to anyone practicing the process, this objection appears to us unduly captious and hostile to the underlying canons of patent interpretation. In any event, Finding 44 finds facts that dispose of the objection. Indeed, it cannot at any rate apply to claims 8 and 9 where the "inorganic salt" is described as "metallic fluoride," and "magnesium fluoride." As for the other claims in suit we can see no reason to suppose that when the "suitable coating" of the specifications is limited to a "stable, water insoluble, [Volume III 306a] evaporated inorganic salt," anyone

seeking to use the process would be left in doubt. The claims always measure and limit the scope of the monopoly; and the defendant does not, and could not properly, suggest that anything that Lyon actually invented he did not disclose when the limitations of the claims are imputed to the description in the specifications. Therefore we are not disposed to draw any distinction between claims 8 and 9 and the other five in suit, though, if we did, it would at most only result in a modification of the judgment not important in this action. As to the objection that the claims confuse or combine process and product, it is so patently untenable that we shall not discuss it.

The important questions are whether the invention had been disclosed in any earlier patent, or had been publicly used, before Lyon filed his application on November 17, 1942; and whether his contribution will support a patent. The process was in two steps: First, to heat the "optical surface" in a vacuum until "absorbed water and grease have been evaporated from the surface," (page two, col. 1, lines 47, 48); and second, to vaporize an "inorganic salt" within the vacuum, meanwhile keeping the "optical surface" heated; "baking of the optical element, evacuation of the chamber and vaporization of the coating material are continued until a suitable layer of the desired thickness * * * has been deposited," (page 2, col. 1, lines 64-68). None of the earlier patents disclosed this sequence, and the nearest were as follows. In November, 1925, Fink and Beers filed the application that issued on December 10, 1929, as Patent No. 1,738,991. It was for a process of coating the inner surfaces of the vacuum chamber [Volume III 307a] of a thermos bottle with vaporized metal, such as magnesium. The purpose of such a coating is to maintain the temperature in the chamber by excluding the heat from the air, or the heat from the contents of the bottle. In April, 1929, Winkler and two others applied in Germany for a patent that issued in this country as Patent No. 1,982,774 on December 4, 1934. This was for mirrors made by condensing in a vacuum vaporized metals—e.g.

an alloy of aluminum and silver—upon a polished base. ("The adhering capacity of the mirror coatings on metallic substrata is quite considerably increased by keeping the polished metallic substrata hot during the deposition of the mirror coatings.") There were three earlier patents for coating the upper part of the inside of an electric bulb, so that none of the light should be reflected upwards. There were also patents for mirrors, designed of course to reflect the light; and therefore the opposite of the patented coatings, whose purpose is to transmit through the "optical surface" as much as possible of the light falling upon it. The defendant indeed insists—relying for this on line 12, col. 1, page 1, of the specifications in suit—that "mirrors" are among those "optical surfaces" or "elements" that the invention covers. However, regardless of any significance of that word where it appears, there cannot be the least doubt that the invention is only for a "light-transmitting optical" element; indeed the coating itself is spoken of as "a light-transmitting evaporated film" (page 1, col. 1, lines 47, 48). The explanation for the inclusion of "mirrors" may be that, as the reflecting coating of a mirror is usually on the rear surface of a transparent plate, it is desirable to have as little light as possible [Volume III 308a] reflected from the front of the plate. so that all would reach the reflecting surface. The purpose of all these patents so widely diverged from that of Lyon that under § 100 (b) they would not serve as anticipations, even if the sequence of steps had more closely anticipated his process.

On the other hand Cartwright and Turner took out three earlier patents that were much nearer to Lyon's, for they disclosed coating an "optical surface" with a film of "inorganic salt." The first—No. 2,207,656—was applied for in December, 1938 and issued on July 8, 1940. It disclosed a process of depositing a coating of non-reflecting substances—"metallic fluorides"—upon a lens or the like by vaporizing it in a vacuum "in the manner now generally well known in the silvering of

mirrors and the like" (page 2, col. 1, lines 21-23). The second—No. 2,281,474—was applied for in March 1939 and issued on April 28, 1942. It disclosed a method of superimposing at least two coatings of different "indices of refraction"; and presupposed the vaporization of "inorganic substances" in a vacuum. The third—No. 2,281,475—was applied for in August 1939 and issued on the same day as the second: it was for a process (and for its product) of coating a lens with similar substances by vaporizing them in a vacuum and thereafter "baking" at from 350° to 500° C. in order to increase their resistance to detachment—"ruggedness"—a practice that became known in the art as "post-baking." The specifications of none of these patents suggested that the "optical surface" should itself be kept hot while it was being coated; the nearest approach to this being in the third patent which did declare it desirable to bake the "surface" at between [Volume III 309a] 400° to 450° C. before vaporization (page 1, col. 1, lines 41-45) —a step that has come to be known as "preheating," and that is, as we have said, the first step of the patented process. Thus, although Lyon's advance lay only in keeping the "optical surface" itself heated while it was being coated, this had not appeared in any patent or printed publication on November 17, 1942. Before considering whether the patent may depend upon it, we will consider whether Lyon's process had been "in public use or on sale" under § 102 (b); or whether "the invention was made • • • by another" before Lyon, under § 102 (g).

Cartwright was one of the most experienced experts in this field, and had been active in experiment even before the year 1938. The military services, and particularly the Navy, were particularly anxious to find a practical way of coating binoculars, periscopes and other "light-transmitting" glass surfaces, which should make the film at once tenacious and viable. Indeed, some of the testimony imputes to the services a scarcely under-

standable estimate of the importance of such a coating. The trouble had been that all the earlier coatings, though their proper composition was known, could be readily scratched or even rubbed off. One condition of success was well understood: before being coated the glass surface should be made as clean as possible: all water or grease must be taken off. An accepted way to do this was Lyon's first step: heat the glass in a vacuum. Again, a familiar, perhaps the only practical, way was to coat the glass after it had been cleaned by vaporizing the "inorganic salt" in the same vacuum in which the glass had been "pre-heated." Finally, it was well understood that to "post-bake" added much to the tenacity of the bond and the "ruggedness" of the coating. [Volume III 310a] However, for some reason, apparently still not quite understood, the art never took Lyon's second step, now generally accepted as the way to secure the optimum bond of the coating to the glass.

Cartwright did indeed fully disclose even this in a letter, written on November 30, 1939, to one, Wilson, of the "Research Corporation," a company engaged in the exploitation of patents, in whose employ he then was, though his chief calling was that of instructor in physics in the Massachusetts Institute of Technology. This letter described the "development made during the last few months on 'invisible glass' "; and the third and ninth experiments which it describes we quote in the margin.* [Volume III 311a, 312a] Not only does the let-

*3. Glass was heated to 150°C, 300°C and 400°C in a vacuum and treated with evaporated magnesium fluoride and also cryolite. The heating was done by having the glass in contact with a heavy piece of chromium plated brass which was heated by a flame before putting on the bell jar. Of course, it could be heated electrically inside the bell jar. Part of the glass extended beyond the hot brass in order to control the effect of heating. At 150°C the cryolite film was noticeably harder where it had been heated but there was only a very slight difference in the hardness of the magnesium fluoride film. At 300°C both films

(*Footnote continued on following page*)

ter prove beyond cavil that Cartwright did conceive that to coat the glass in a vacuum, while heated, made the coating "very much harder," but it also shows not only that he had practiced it, but that he considered the possibility of "getting protection on the method": i. e. having it patented. Furthermore, on the day before—November 29th—he had told one, Hewlett, a physicist of the General Electric Company, of coating the glass while it was hot, and on December 4th Hewlett wrote to his own company describing that process, and adding that "the ruggedness of these films is very striking (see the two samples he gave me). They may be washed in tap water and even scratched with a knife blade without producing any scratches." Moreover, neither does the letter, nor any testimony, intimate that Cartwright imposed any promise of secrecy on Hewlett, although Hewlett might be regarded as in some sense a competitor. Hewlett experimented with the information he had

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(*Footnote continued from preceding page*)

were very much harder where they had been heated, especially the cryolite. At 400°C, the hardness of the films was remarkable and when they were waterproofed the cryolite seemed almost as hard as the magnesium fluoride and it was somewhat more transparent. I have been intending to heat the eye-glass lenses that were obtained from the American Optical Company by radiation while magnesium fluoride and cryolite was being evaporated. Dr. Hewlett said he had heated glass in vacuum by radiation during the evaporation and I do not know if we could obtain protection. My idea is to have the holder for the glass of polished metal chromium plated, have a filament heater back of the glass and surround all this with a polished metal shield. Glasses absorb radiation longer than 3u and polished metal reflects radiation beyond 3u very well. * * *

9. * * * I have made the equipment for heating the glass by radiation while the glass was being treated. The results were most pleasing and, if it is not too late, it would be worth while getting protection on the method. I have used this method for depositing cryolite, chiolite, magnesium fluoride and potassium fluorosilicate. * * * This looks like the logical way to treat photographic lenses during their manufacture as well as eye glasses.

got, and made a number of coatings in the summer of 1940, but finally decided to abandon the process, because he concluded that those coatings deposited on heated glass scratched more easily than those on unheated. Since his user was not only experimental, but in addition was abandoned, we disregard it under § 102 (g); as we also do the work of one, Begg, an employee of the Eastman Kodak Company, which that company attempted to re-uscitate later and to use as an anticipation of Lyon. But Cartwright's activities we may not so summarily dispose of, and to them we turn.

By the fall of 1939 he had already found that his work on non-reflective coatings took up so much of his time that he employed a student named Clark to help him, and Clark kept with [Volume III 313a] him until May, 1940. Before he left, Cartwright had enjoined upon him the strictest secrecy which Clark observed, not only while he was in Cartwright's employ, but, also, after he was employed by another company, the National Research Corporation. Cartwright himself continued to work for the Institute until August, 1940, when he went into the employ of the Navy for that month, during which, although he was engaged in making non-reflecting lenses, he did not use the patented process; nor does he appear to have told anyone about it. He gave as his reason for not using it that he had no apparatus that would produce a high enough vacuum. On the other hand, already while he was at the Institute, he made and sold coated lenses, as a private venture; and, after he left the Navy and went into the service of the Corning Glass Works at Corning, New York, he again took up the same business with the help of his wife. It resulted in a substantial income, at times amounting to $3,000 a year, and many, though not all, of the lenses were coated while hot.

Were these activities either a "public use" or "sale" under § 102 (b), or was Cartwright a prior inventor under

§ 102 (g)? True, the fact that the process could not be deduced from the lenses sold would not alone prevent their sale from being a "public use."* It is indeed difficult to see why this should be so, for such sales could not in fact enlighten the art, especially in the case of a process, which the product does not [Volume III 314a] ordinarily disclose, unlike a machine which may disclose its concealed mechanism, if it be dismantled. The law does not however appear to have made any such distinction. However, although such a product will be a "public use," it will be so only on condition that it is neither experimental, secret, nor abandoned; and we think that Cartwright abandoned his discovery as soon as it emerged from the stage of experiment. We do not rely upon the secrecy that he enjoined upon Clark except in so far as it goes to confirm the continued lack of finality of his activities. His disclosure to Hewlett is hardly consistent with unqualified secrecy, although it too is not inconsistent with the continued tentative character of what he was doing. But we agree with what Judge Burke said in his opinion. "Whatever experiments he had conducted * * * and whatever occasional use he had made of it in his commercial work had convinced him that it was inferior in results to his own patented post-baking method, and that the results obtained were not worth the effort, and did not warrant bringing it to light in the art. * * * His testimony at the trial leaves no doubt about the fact that he is still uncertain one 'could not get as hard a film if you left out the actual heating in the vacuum.'" The defendant replies that it is not necessary that a third party who puts the invention in "public use or sale" must understand the value and importance of his discovery. That is indeed true; a man may conceive a process, put

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* *Hall* v. *Macneale*, 107 U. S. 90, 97.
Brush v. *Condit*, 132 U. S. 39, 48, 49.
Electric Storage Battery Co. v. *Shimadzu*, 307 U. S. 5, 20.

it in "tangible form," test it out and fail to exploit [Volume III 315a] it, because he does not see how valuable it is. That was not, however, all that Cartwright did. He did indeed test it out to his satisfaction; and when he had done so, he concluded it would not do what he was after. It did not produce a more "rugged" film and he gave it up. It was in effect an abandonment; it did more than fail to advance the art; it put the process among those efforts that are proved useless. All the reasons that have made the courts refuse to treat experimental users as anticipations,* apply even more convincingly; it is not alone that such activities are not evidence of anticipation, they are evidence against. We do not forget that in *Corona Cord Tire Co.* v. *Dovan Chemical Corp.*, 276 U. S. 358, 383, the Supreme Court said of a process that it is "reduced to practice when it is successfully performed"; but it should be noted that the Court also declared that "the tests of Kratz" were not "abandoned laboratory experiments." We conclude therefore with Judge Burke that Cartwright neither put the process to "public use," nor was he its prior inventor.

Therefore we at length come to the question whether Lyon's contribution, his added step, was enough to support a patent. It certainly would have done so twenty or thirty years ago; indeed it conforms to the accepted standards of that time. The most competent workers in the field had for at least ten years been seeking a hardy, tenacious coating [Volume III 316a] to prevent reflection; there had been a number of attempts, none satisfactory; meanwhile nothing in the implementary arts had been lacking to put the advance into operation; when it appeared, it supplanted the existing practice and occupied substantially the whole field. We do not see

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* The Corn Planter Patent, 23 Wall. 181, 210, 211.
Electric Storage Battery Co. v. *Shimadzu, supra* (307 U. S. 5).

how any combination of evidence could more completely demonstrate that, simple as it was, the change had not been "obvious * * * to a person having ordinary skill in the art"—§ 103. On the other hand it must be owned that, had the case come up for decision within twenty, or perhaps, twenty-five years before the Act of 1952 went into effect on January 1, 1953, it is almost certain that the claims would have been held invalid. The Courts of Appeal have very generally found in the recent opinions of the Supreme Court a disposition to insist upon a stricter test of invention than it used to apply—indefinite it is true, but indubitably stricter than that defined in § 103.* Indeed, some of the justices themselves have taken the same view. ** The Act [Volume III 317a] describes itself as a codification of existing law, as it certainly is in the sense that the structure of the system remains unchanged. Moreover those decisions that have passed upon it have uniformly referred to it as a codification,

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* *Buono* v. *Yankee Maid Dress Corp.*, 77 Fed (2) 274, 276 (C. C. A. 2).

Cleveland Trust Co. v. *Strelber-Schroth Co.*, 108 Fed (2) 109, 112 (C. C. A. 6).

Picard v. *United Aircraft Corp.*, 128 Fed (2) 632, 636 (C. C. A. 2).

United States Gypsum Co. v. *Consolidated Expanded Metal Co.*, 130 Fed (2) 889, 892 (C. C. A. 6).

Trabon Engineering Corp. v. *Dirkes*, 136 Fed (2) 24, 27 (C. C. A. 6).

Cleveland Punch & Shear Works Co. v. *E. W. Bliss Co.*, 145 Fed (2) 991, 999 (C. C. A. 6).

Frank Adam Electric Co. v. *Colt's Patent Fire Arms Mfg. Co.*, 148 Fed (2) 497, 502 (C. C. A. 8).

Browne & Sharpe Mfg. Co. v. *Kar Engineering Co.*, 154 Fed (2) 48, 52 (C. C. A. 1).

Foxboro Co. v. *Taylor Instrument Co.*, 157 Fed (2) 226, 234 (C. C. A. 2).

Falkenberg v. *Bernard Edward Co.*, 175 Fed (2) 427, 429 (C. A. 7).

Alemite Co. v. *Jiffy Lubricator Co.*, 176 Fed (2) 444, 448, 449 (C. A. 8).

** *Jungersen* v. *Ostby & Barton Co.*, 335 U. S. 560, 568-572.

although so far as we have found none of them has held that §103 did not change the standard of invention.* And so the question arises whether we should construe §103 as restoring the law to what it was when the Court announced the definition of invention, now expressly embodied in §103, or whether we should assume that no change whatever was intended. To decide that question it seems desirable to look briefly backward.

From 1793, when the second patent act was passed, ** until the Act of 1952, the only statutory standard for invention was that the discovery should be "new and useful"; and indeed the Act of 1952 itself repeats this same test in § 101. Congress did not try to define it but left it to the courts to develop by precedent. So far as we can find, it was not until 1850 that the Supreme Court made any such attempt; so that, although the disclosure must be "new," it was so, provided it had not been published or in public use and was original. However, in *Hotchkiss* v. *Greenwood,* 11 How. 248, the Court imposed an authoritative gloss upon the word, which it put in the following words (p. 267): "unless more ingenuity and skill [Volume III 318a] in applying the old method," were necessary "than were possessed by an ordinary mechanic acquainted with the business, there was an absence of that degree of skill and ingenuity which constitutes es-

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* *Stanley Works* v. *Rockwell Mfg. Co.,* 203 Fed (2) 846 (C. A. 3).

General Motors Corp. v. *Estate Stove Co.,* 203 Fed (2) 912 (C. A. 6).

Pacific Contact Laboratories v. *Solex Laboratories,* 209 Fed (2) 529 (C. A. 9).

Interstate Rubber Products Corp. v. *Radiator Specialty Co.,* 214 Fed (2) 546 (C. A. 4).

Vincent v. *Suni-Citrus Products Co.,* 215 Fed (2) 305 (C. A. 5).

Wasserman v. *Burgess & Blacher Co.,* 217 Fed (2) 402 (C. A. 1).

** 1 Statutes at Large 318.

sential elements of every invention. In other words, the improvement is the work of a skillful mechanic, not that of the inventor." The instruction to the jury, the exception to which the court overruled, had been in substantially the same words, p. 253: if "no other ingenuity or skill" be "necessary to construct the knob than that of an ordinary mechanic acquainted with the business, the patent is void." Thereafter this became the standard rubric and was applied in many cases. The variants were numberless; and "invention" became perhaps the most baffling concept in the whole catalogue of judicial efforts to provide postulates for indefinitely varying occasions. However, the Court never formally abjured it; nor has it ever substituted any other definite test. Even *Cuno Engineering Corp.* v. *Automatic Devices Corporation*, 314 U. S. 84—which in expression probably was the furthest departure—recognized the continued authority of *Hotchkiss* v. *Greenwood, supra* (p. 90): "if an improvement is to obtain the privileged position of a patent more ingenuity must be involved than the work of a mechanic skilled in the art." Again, page 91: "The principle of the *Hotchkiss* case applies to the adaptation or combination of old or well known devices for new uses."

We assume that the usual presumption against retroactivity would have applied to § 103, had the purpose not been so explicit to make the Act retroactive; but § 4(a) leaves no possibility of doubt as to that: It is to "apply to unexpired patents granted [Volume III 319a] prior to such date" January 1, 1953 "except as otherwise provided"; and all that was "otherwise provided" was in § 4(e): "Nothing contained in Title 35, as enacted by section 1 hereof, shall operate to nullify any judicial finding prior to the effective date of this Act on the validity of any patent by a court of competent jurisdiction."* This

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* *United Mattress Machinery Co.* v. *Handy Button Machine Co.*, 207 Fed. (2) 1 (C. A. 3).

interpretation is, moreover, confirmed by the report of the House as to § 103, which we quote in the margin.* Therefore, we can see no escape from accepting the text as it reads, except as "at a later time * * * some criteria * * * may be worked out." It only remains to ask whether, if the change is to apply retroactively, the Act is pro tanto unconstitutional. Arguendo we will accept it as possible that the decisions of courts may give such an absoluteness to the words of a statute as to make a deliberate substitution of another locution the same as though the precedents had been incorporated verbatim into the statute; that, if that were true in the case at bar, the Act would in effect grant new monopoly; and, finally, that the grant of a new monopoly restrospectively would be invalid.** We may accept that hypothesis because the facts [Volume III 320a] do not fulfill the premises. In the first place § 103 only restores the original gloss, substantially in ipsissimis verbis; which has never been overruled; but on the contrary for seventy or eighty years had continued to be regarded as authoritative. Moreover—and this is the important consideration—although it may have ceased in practice to be followed, and had come to enjoy no more than lip service, there never has been the slightest intimation of any definite substitute; nothing more than an un-

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* There is no provision corresponding to the first sentence explicitly stated in the present statutes, but the refusal of patents by the Patent Office, and the holding of patents invalid by the courts, on the ground of lack of invention or lack of patentable novelty has been followed since at least as early as 1850. This paragraph is added with the view that an explicit statement in the statute may have some stabilizing effect, and also to serve as a basis for the addition at a later time of some criteria which may be worked out.

The second sentence states that patentability as to this requirement is not to be negatived by the manner in which the invention was made, that is, it is immaterial whether it resulted from long toil and experimentation or from a flash of genius.

** cf. *Great Northern Railway* v. *Sunburst Oil & Refining Co.*, 287 U. S. 358.

expressed and unacknowledged misgiving about the increased facility with which patents were being granted. Such judicial attitudes are indeed the stuff of which much of the law is made; but we cannot agree that, however controlling upon the lower courts, they are a warrant for that solid assurance, the disappointment of which will make a statute invalid. Courts again and again shift their position; and, although they are apt to do so under cover of nice distinctions, they impose the risk of anticipating the changes upon those who may have acted upon the faith of the original. Certainly a legislature, whose will the courts have undertaken to proliferate, must be free to reinstate the court's initial interpretation, even though it may have been obscured by a series of later comments whose upshot is at best hazy.

Finally, we cannot agree that this retroactivity should be limited to a recognition of the patent only in the future: That is, that, although the patentee may enjoin its infringement after January 1, 1953, he may not recover damages for any earlier infringement or collect any profits of the infringer. As a matter of construction § 4(e) seems to us conclusive; it preserves any [Volume III 321a] "finding" of a court before January 1, 1953; but leaves the court free thereafter to apply the Act as though it had existed when the unexpired patent issued. Were we to deny the patentee the usual remedies, an anomalous situation would arise; for it would follow that, although an infringer would not be liable, quoad the recovery of damages or profits, for taking his chances in disregarding the patent, he would nevertheless have no protection for any investment or other industrial expense that he might have made before the date when the Act took effect. We should either accept as an adequate protection such assurance as infringers might have drawn from the earlier precedents, or we should find them as we do, too amorphous for that purpose. Believing that they will not serve, we hold that the patent should be regarded as valid ab initio for all purposes.

There remains only one other point of enough importance to demand discussion: i. e. whether what Lyon had done before November 17, 1941,—a year before his filing date—forfeited his right to a patent under § 102 (b) of the Act: that is, [Volume III 322a] whether he had put it in "public use or on sale in this country more than one year prior to the date of application." Lyon began to work for the Naval Research Laboratory in January, 1941, trying to find an effective coating. By the middle of June, 1941, he was assured that he "had consistent results as far as hardness and adherence of the film was concerned." He "appeared to be on the right track"; but much testing had still to be done. Nevertheless, "by the first of July" he "was reasonably certain that" he "was getting a hard durable film * * * remarkably consistent in the results." "Many, many tests were made," which, however, by September, 1941 had convinced him "that we were in a position to try this thing out on some actual simple instruments." There were a number of old binoculars, which were given to him to coat and it was arranged that these should be introduced surreptitiously, so that the users would not know which had been coated by the new process and which had not. From binoculars he went to other instruments, so that by October first the "Optical Shop of the Naval Gun Factory" had "completed certain experimental work," and "estimated that $10,000" was "required to provide for equipment and further research." The "experimental work" had "developed to such a stage as to place the product in production." The officer in charge concluded the letter from which we quote by requesting that the Bureau of Ordinance should approve a "project" for $20,000 both for "production equipment in the shop" and for five units for "repair activities afloat." Such an approval was issued on October 30; but it is to the last degree unlikely that any production should have taken place within three weeks, that was not part of the "further research" deemed necessary on October 1st. [Volume III

323a] At any rate it is clear that the defendant, which had the burden, did not prove its defence. Its theory is that, if with Lyon's consent the Navy exploited the process, it was the same as though he had done so himself; indeed in the end the Navy's exploitation would be far more profitable to him than any sales that he could personally make. It is not necessary to pass upon the legal validity of that interpretation of § 102 (b), because, though we should accept it arguendo, it was not proved, as we have just said.

We agree with Judge Burke's searching and comprehensive analysis, and the judgment will be affirmed.

Judgment affirmed.

[Volume III 324a]

UNITED STATES COURT OF APPEALS

FOR THE SECOND CIRCUIT.

At a Stated Term of the United States Court of Appeals, in and for the Second Circuit, held at the United States Courthouse in the City of New York, on the 20th day of June one thousand nine hundred and fifty-five.

Present:

Hon. Learned Hand,
Hon. Thomas W. Swan,
Hon. Carroll C. Hincks,
Circuit Judges.

DEAN A. LYON,

Plaintiff-Appellee,

v.

BAUSCH & LOMB OPTICAL CO.,

Defendant-Appellant.

Appeal from the United States District Court for the Western District of New York.

This cause came on to be heard on the transcript of record from the United States District Court for the Western District of New York, and was argued by counsel.

ON CONSIDERATION WHEREOF, it is now hereby ordered, adjudged, and decreed that the judgment of said District Court be and it hereby is affirmed.

/s/ A. DANIEL FUSARO
Clerk

[Volume III 360a]

UNITED STATES COURT OF APPEALS

FOR THE SECOND CIRCUIT

No. 216 October Term, 1954.

Petition filed July 11, 1955 Decided July 29, 1955

Docket No. 23345

DEAN A. LYON,

Plaintiff-Appellee,

v.

BAUSCH & LOMB OPTICAL CO.,

Defendant-Appellant.

Before: HAND, SWAN and HINCKS, Circuit Judges.

On petition by the defendant-appellant for a rehearing upon the decision of this court on June 20, 1955, affirming a judgment of the District Court for the Western District of New York holding valid and infringed claims 1, 2, 3, 4, 5, 8 and 9 of Patent No. 2,398,382.

Edward H. Cumpston, for the Petitioner.

PER CURIAM:

The petition for rehearing is denied except as to the point raised by the first two sentences of Point IV, subdivision 1, thereof. As to the point thus excepted from denial further consideration brings us to the conclusion that the patent specifications fail adequately to support claims 1, 2, 4 and 5 which describe the coating claimed therein in terms so broad as to include materials which, so far as the proofs [Volume III 361a] show, produce optical surfaces which are not light-transmitting surfaces.

We hold, therefore, that, without disturbing our affirmance as to claims 3, 8 and 9, the decree below must be reversed as to claims 1, 2, 4 and 5 for lack of adequate disclosure. With leave, however, to the plaintiff, if so advised, to file a petition for rehearing addressed to the holding above stated, containing any pertinent argument not covered in his earlier briefs.

[Volume III 362a]

UNITED STATES COURT OF APPEALS

SECOND CIRCUIT

At a Stated Term of the United States Court of Appeals in and for the Second Circuit, held at the United States Court House, in the City of New York, on the 29th day of July, one thousand nine hundred and fifty-five.

Present:

Hon. Learned Hand,
Hon. Thomas W. Swan,
Hon. Carroll C. Hincks,
Circuit Judges.

DEAN A. LYON,
Plaintiff-Appellee,

v.

BAUSCH & LOMB OPTICAL CO.,
Defendant-Appellant.

A petition for a rehearing having been filed herein by counsel for the appellant,

Upon consideration thereof, it is

Ordered that said petition be and hereby is denied except as to the point raised by the first two sentences of Point IV, subdivision 1, thereof.

Further ordered that the previous affirmance of the judgment below as to claims 3, 8 and 9 be and it hereby is confirmed but that as to claims 1, 2, 4, and 5 the judgment below be and it hereby is reversed for lack of adequate disclosure with leave to the appellee, if so advised, to file a petition for rehearing limited in accordance with the opinion of this Court.

/s/ A. DANIEL FUSARO
Clerk

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HAROLD B. WILLEY,

IN THE

Supreme Court of the United States

OCTOBER TERM, 1955

No. 379

BAUSCH & LOMB OPTICAL CO., *Petitioner,*

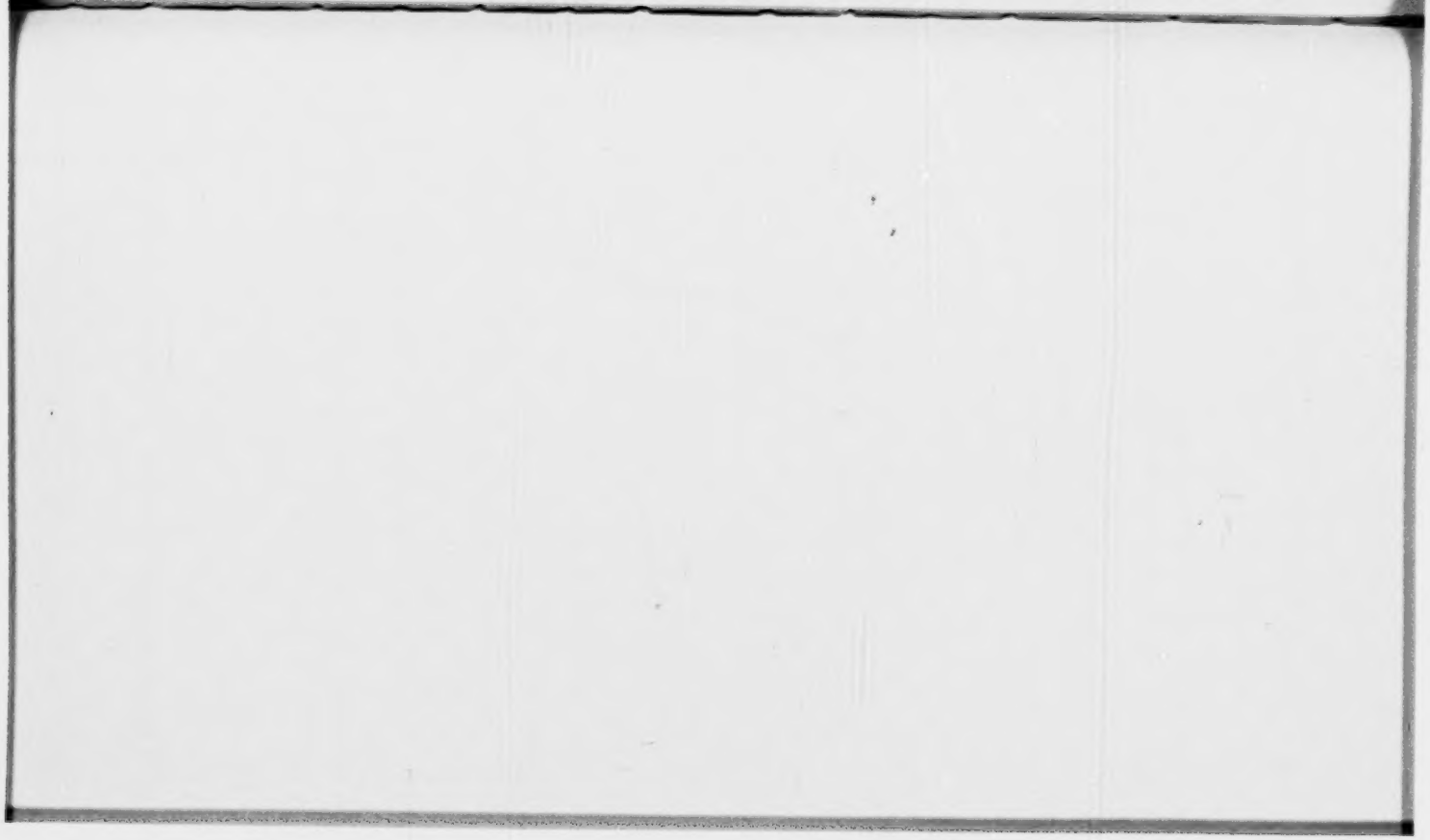
v.

DEAN A. LYON, *Respondent.*

BRIEF FOR RESPONDENT IN OPPOSITION TO PETITION FOR WRIT OF CERTIORARI

JOHN W. MALLEY,
C. WILLARD HAYES,
730 Fifteenth St., N.W.,
Washington 5, D. C.
Attorneys for Respondent.

PRESS OF BYRON S. ADAMS, WASHINGTON, D. C.



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APPENDIX

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1955

No. 379

BAUSCH & LOMB OPTICAL CO., *Petitioner,*

v.

DEAN A. LYON, *Respondent.*

BRIEF FOR RESPONDENT IN OPPOSITION TO PETITION FOR WRIT OF CERTIORARI

INTRODUCTION

This litigation is between an individual inventor, the plaintiff-respondent Lyon, and the defendant-petitioner Bausch & Lomb Optical Co., one of the largest optical corporations of the world.

This is not a "gadget" patent case as in *A. & P.* v. *Supermarket.** The invention is one of real dignity

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* *Great Atlantic & Pacific Tea Co.* v. *Supermarket Equipment Corp.*, 340 U.S. 147 (1950).

and importance; an improvement which m
the successful application of a complex scientific and chemical vacuum-evaporation process for depositing extremely thin light-transmitting films on optical elements for use in military instruments, binoculars, cameras, etc. It was of great and direct benefit to the public, contributing substantially to the success of our Armed Forces in the last war. In the words of the trial Court, it was an "outstanding" discovery which "greatly benefited the United States Navy" and "the industry in general" and was "overlooked by the most skilled scientists working in the art for long periods of time on the problem of obtaining hard and durable films though the solution was under their very eyes" (Find. of Fact 10, Vol. II, DA* 933a, Con. of Law 9, Vol. II, DA 947a).

This suit does not involve an attempt by a strong company to enforce a sweeping monopoly in patent rights. It is a defensive suit by an individual inventor, against this corporation which has asserted the right to deliberately appropriate his property while being unwilling to pay a small royalty which the trial Court found was reasonable (Find. of Fact 16, 17, Vol. II, DA 935a, 936a).

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* References to the record herein use "DA" with reference to Volumes I and II of defendant-appellant's appendix in the Court of Appeals, and "PA" with reference to the single Volume of plaintiff-appellee's appendix in the Court of Appeals.

The decision and findings of the trial Court are for convenience reprinted and bound in as the appendix to this brief, with the appropriate page numbers 910a-947a inclusive as used in Volume II of Defendant-Appellant's appendix in the Court of Appeals, being indicated. In referring to the decision (opinion) and findings of the trial Court throughout this brief, the page numbers of Volume II of Defendant-Appellant's appendix below (pages 910a-947a) will be used, but quick reference can be made to the designated page in the appendix bound in this brief.

patent does not restrict use of the invention by or for the government. The government retained a royalty-free license for all work performed for it, permitting its employee, the plaintiff, to retain title to the patent as applied to commercial or non-government use of the invention. It is only defendant's commercial operations, for profit, which are involved.

For a period of almost ten years, i.e., for substantially two-thirds the life of plaintiff's patent, the greatest of the optical corporations have caused to be withheld from plaintiff the modest commercial reward granted to him by his government for his great discovery. Plaintiff made his discovery in 1941, and devoted all his efforts to developing the invention for the Navy during the war and prior to the time of the issuance of his patent in 1946.

The Eastman Kodak Co. immediately upon issuance of plaintiff's patent unjustly involved it in interference with an application which it filed in the name of one Beggs, who had left the employ of the Eastman company several years before this application was filed in his name. The trial Court termed this Beggs application a "device to exact a license from the plaintiff" (Find. of Fact 23, 25, Vol. II, DA 938a).

In the meantime, defendant had applied plaintiff's method to its commercial work and refused to take a license. This suit was filed in 1949. Expensive pre-trial and trial proceedings lasted until early in 1954, when judgment was entered for plaintiff. Defendant Bausch & Lomb was held to be a deliberate infringer, and the patent was held valid. The appeal proceedings from that judgment extended until the middle of 1955,

when the Court of Appeals affirmed the judgment in favor of plaintiff.

Now, ten years after the issuance of plaintiff's patent, and almost fifteen years after he made his invention, defendant seeks, under the guise of "Questions" purporting to present the interests of the public, to further delay plaintiff's enjoyment of his patent by requesting a new review of the facts in the Supreme Court, rather than to pay plaintiff a modest royalty.

JURISDICTION

While the jurisdiction of the Supreme Court to review by granting certiorari is comprehensive, the decisions and findings below do not support nor present the questions posed in the petition.

The "Questions" of the petition are broad and indefinite, and they only challenge certain general obiter dicta expressions taken from context out of the opinion of the Court of Appeals. The opinion of the Court of Appeals must be read in the light of the decision and findings of the trial Court, to which it specifically refers, assumes familiarity with, and adopts.*

Petitioner presents its questions as though a patent *held invalid* for lack of invention before the 1952 Patent Act has been *held valid after* that Act, and assumes findings of lack of invention, anticipation and obviousness which never were made. On the contrary, the claims of the patent now in issue were held valid by both courts on strong findings of invention, novelty, and lack of obviousness. The patent *never was* held invalid for lack of invention.

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* The decision and findings of the trial Court are for convenience reprinted and bound in as the appendix to this brief.

In short, this case and this patent do not properly present to this Court the questions posed in the petition, and if such questions require determination, they must await a case which properly supports and presents them.

RESPONDENT'S STATEMENT OF THE CASE

Respondent does not accept petitioner's "Statement of the Case." It does not present the material facts as required by Rule 23-1 (e). It is so commingled with inaccuracy and misstatements of the findings of the Courts below as to be a sufficient reason for denying the petition under Rule 23-4.

The trial Court found that defendant Bausch & Lomb deliberately appropriated plaintiff's invention for its own commercial profit, and even *publicly claimed credit for having originated the invention,* while knowing that it had been discovered by the plaintiff (Find. of Fact 15, 16, Vol. II, DA 935a, 936a). The trial Court's findings were unanimously affirmed by the Court of Appeals (Appendix to Petition, page 17a).*

Contrary to the arguments in petitioner's "Statement of the Case" the facts found by the trial Court are that plaintiff's invention solved a serious problem which had existed for a long period of years in the industry (Find. of Fact 3, Vol. II, DA 929a). The great corporations and laboratories, such as Eastman Kodak Company and General Electric Company, after intensive efforts over a period of years, had failed to solve the problem. Defendant Bausch & Lomb had

* The opinion of the Court of Appeals is printed in an appendix bound in the Petition.

also worked intensively on the problem over a period of years and had failed to solve it. Defendant's efforts were so unsuccessful that it had recommended to the Navy Department that the whole evaporation process be abandoned (Find. of Fact 6, Vol. II, DA 931a).

The most skilled scientists in the industry, including Dr. Hewlett of General Electric, Dr. Turner of Bausch & Lomb, Dr. Cartwright of the Research Corp. and M.I.T., and Drs. McLeod and McRae of Eastman Kodak Co. had the solution of the problem under their very eyes but failed to perceive it (trial Court Decision Vol. II, DA 915a, 920a, 921a, 922a, Find. of Fact 31, 34, 35, 39, Vol. II, DA 940a, 943a). The prior patents and publications of the art had failed to teach these skilled scientists the plaintiff's invention (Find. of Fact 37, 38, 39, Vol. II, DA 943a).

The country was at the verge of the late World War when the industry was frustrated by these failures. The Navy needed a solution to the problem but the great corporations and laboratories had failed to supply it. In 1941, the plaintiff, then a minor government employee at the Naval Gun Factory, discovered the method of the patent in suit, which proved to be the solution to the problem (Find. of Fact 7-9, Vol. II, DA 931a-933a). The importance of plaintiff's discovery is indicated by such as this finding of fact of the trial Court:

> "10. Following this successful work the plaintiff's method was applied by the Navy to virtually all important optical equipment, including binoculars, gun director telescopes, spyglasses and range finders. The success of the process was so outstanding that priorities were established for coating the optical instruments of all war vessels,

particularly combatant ships, in accordance with the plaintiff's method, as soon as the availability of the ships would permit, and the method was applied to the optics of both new construction ships, and ships in service. Numerous repair ships and tenders of the Navy were especially provided with equipment to apply the process at points adjacent to combat areas. *The plaintiff's invention greatly benefited the United States Navy and was regarded by the Navy as the most important development in submarine periscopes in recent years.** Plaintiff received special citations from the Chiefs of the Bureau of Ships and Ordnance of the Navy Department, and later by the Secretary of the Navy. The plaintiff's invention *was also adopted by the Army* for its optical equipment *and later by the industry in general.*" (Vol. II, DA 933a).

The plaintiff's method supplanted all other methods previously used. Other methods such as Cartwright's post-baking were supplanted by plaintiff's invention. The program which the Research Corp. had set up licensing Cartwright's patents including his method of post-baking was in the words of the trial Court "paralyzed by the widespread adoption of plaintiff's invention." (Vol. II, Find, of Fact 18, DA 936a).

After their own failures, certain of the optical corporations of the industry refused to recognize the plaintiff's patent though they were fully aware that it was plaintiff who had solved the problem. These corporations even publicly claimed credit for having originated the process while knowing it was the work of the plaintiff (Find. of Fact 15, 21, 22, Vol. II, DA 935a, 937a).

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* Emphasis in quotations throughout is ours.

It was found as a fact by the trial Court that when defendant commenced its commercial work "it was aware that it was producing the method covered by the plaintiff's patent" (Find. of Fact 16, Vol. II, DA 936a). Plaintiff had offered defendant Bausch & Lomb a license on royalty which the trial Court found to be reasonable (Find. of Fact 16, 17, Vol. II, DA 935a, 936a). The royalty requested by plaintiff would have amounted to about six cents on binoculars which sold for two hundred and ten dollars ($210.00), (PA* 155a).

SUMMARY OF ARGUMENT

Petitioner's "Statement of the Case" is inaccurate and misleading. Contrary to its representations, the Courts below found that plaintiff's discovery was a novel solution of a long existing and serious problem in the industry, that it was not obvious, and that defendant's infringement was deliberate. The facts as found below establish invention under the severest tests.

Petitioner's "Questions" 1 and 2 are objectionably broad and indefinite, and are not supported by any *real* conflict either with respect to the patent in suit or important principles of federal law. Plaintiff's discovery has been held to be a patentable invention by all Courts. Specifically, plaintiff's patent was not held invalid for lack of invention prior to the 1952 Patent Act, and it does not present a case for comparing the trend of decisional law in one period of years with that in another.

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* References to the record herein use "PA" with reference to the single Volume of plaintiff-appellee's appendix in the Court of Appeals.

Petitioner's "Questions" 3 and 4 misrepresent and merely dispute the findings of fact of the Courts below. The Supreme Court does not undertake to review concurrent findings of Courts below, particularly where the evidence was largely testimony of scientific experts and where the findings were complete and carefully prepared.

The applicable 1952 Patent Act states the test of invention as whether or not the discovery or improvement was obvious to a person skilled in the art. This test is not new with the 1952 Patent Act, but was used in many leading cases prior to that Act by the Supreme Court and the various Courts of Appeals. The Congress stated this test with the view that the statute might have a stabilizing effect. Both the trial Court and the Court of Appeals recognized the unprecedented completeness of the evidence establishing that plaintiff's discovery had not been obvious to the *most skilled* in the art, and they so found in declaring the patent to be valid. The findings of the Courts below establish that the discovery of the patent in suit meets the test of invention under the most rigid standard. Plaintiff's patent therefore does not present a case for comparing the trend of decisional law in one era with that in another, in order to now determine if the 1952 Patent Act has wrought a change.

ARGUMENT

PETITIONER'S "STATEMENT OF THE CASE" IS INACCURATE AND MISLEADING

Contrary to the true findings, petitioner stubbornly states the case as though the Courts below found that no problem had existed in the art, as though it had been found there was no novelty in plaintiff's discovery

and that it was anticipated by prior patents and publications, as though plaintiff's solution of the problem had been found to be "obvious" to those skilled in the art, and further as though defendant's infringement had been innocent rather than deliberate. These representations are merely a reiteration of the same arguments which were unsuccessfully advanced by petitioner in the Courts below.

It is not possible within desirable brevity of a response, to point out all instances in petitioner's "Statement of the Case" where the true facts and findings are misstated or distorted by argument, but the following instances demonstrate that petitioner's "Statement of the Case" is entirely unreliable.

In the first paragraph of the statement (Petition, page 8), after describing the evaporation process as used before the plaintiff's invention, petitioner states it was then known (implying it was so found below) that "a more tenacious and hard film" was produced by a method step known as "preheating." In the same sentence, it is stated with the same implication, that a step known as "post-baking" had "improved the tenacity and ruggedness of the coating."

The adroit wording of the same sentence also leaves the impression that this "preheating" as known in the art, was carried out *in the vacuum chamber,* rather than *in the outside air.*

The stage of the process where the heat is applied to the optical elements is of great significance because plaintiff's patented invention, which first obtained these consistently hard and durable coatings, involves heating the lenses *in the vacuum* and maintaining them in heated condition *in the vacuum* while the film is

being applied. Petitioner's description of the known "preheating" step, as involving "heating the lens, before being coated *in the vacuum*" appears to intentionally suggest that the plaintiff's method had been known and practiced in the industry prior to his invention, contrary to the positive and opposite findings of the trial Court which were affirmed by the Court of Appeals.

The trial Court, after weighing all of the evidence, discussed these known "preheating" and "post-baking" steps and found (Vol. II, DA 910a) that prior to the invention "optical elements had been coated with such materials but the coatings *had not* been *consistently rugged and durable*" and that "The *lack* of *consistent ruggedness* of the coatings had imposed inherent limitations on their use in the industry." The trial Court after specifically discussing the known "preheating" and "post-baking" steps (Vol. II, DA 911a) found that "All of such prior methods left much to be desired *with respect to the quality of ruggedness and durability* of the coated surfaces."

With respect to the implication of the petition that the "preheating" step was performed *in the vacuum*, the trial Court specifically and accurately defined the "preheating" as known in the art, as a step which was performed on the optical elements "*before* they were placed in the vacuum chamber" (Vol. II, DA 911a, lines 10 and 11), (Find. of Fact 4, Vol. II, DA 930a, line 21).

With respect to the results of the "preheating" and "post-baking" steps, it is noteworthy that in the paragraph of the "Statement of the Case" referred to, petitioner does not refer to findings below but merely

to the specification of plaintiff's patent. Even in so doing, the reference is either erroneous or intentionally misleading. The page of the specification of the patent referred to (Vol. II, DA 552a) after describing the preheating and post-baking steps, states that films so produced "*are not* sufficiently hard, durable and tenacious to resist scratching and abrasion, *nor are they sufficiently hard, durable and tenacious* to resist the corrosive action of atmospheric conditions."

The second paragraph of petitioner's "Statement of the Case" (Petition p. 8) again and more positively misstates the true facts in the words "It was known practice also in coating with such light-transmitting (reflection-reducing films) . . . to heat the lens *while being coated in the vacuum,* for the same purpose of cleaning it, . . ."

The trial Court found on all the evidence that "prior methods had also been used to pre-heat the optical elements *before* they were placed in the vacuum chamber" (Vol. II, DA 911a). The trial Court also found that "heating *in the vacuum* chamber, *while* a coating is being evaporated onto the optical surface, had *not* been disclosed in the art of applying inorganic salts to an optical surface" (Vol. II, DA 913a). The trial Court found that the patent in suit "defines a *new* and useful method or process residing in the heating of the optical elements *in the vacuum* to an elevated temperature and depositing the inorganic salt coatings of the metallic fluorides, such as magnesium fluorides, thereon *while they are maintained at this elevated temperature in vacuum*" (Find. of Fact 43, Vol. II, DA 944a).

The trial Court found that "The persons most skilled in the art had not discovered the invention of the patent in suit and had not appreciated that unusual results could be obtained thereby in securing harder films by practicing the method as defined in the patent in suit." (Find. of Fact 7, Vol. II, DA 932a).

The Court of Appeals specifically found that this step of heating the lens while being coated in the vacuum with the light transmitting films, was novel. The Court of Appeals stated "although Lyon's advance lay only in keeping the 'optical surface' itself heated *while it was being coated, this did not appear in any patent or printed publication* on November 17, 1942" (Appendix to Petition, pages 3a, 5a).

The third paragraph of petitioner's "Statement of the Case" (Petition p. 8) states the history of plaintiff's discovery and invention as though the plaintiff had learned of the invention when he visited various optical plants in 1941.

The trial Court specifically found that "plaintiff made his discovery *independently,* and did *not* acquire knowledge of the invention from the prior art *or from any of the facilities* which he had visited" (Find. of Fact 8, Vol. II, DA 932a).

This "Statement of the Case" (Petition p. 10) refers to arguments of "government solicitors" and an "interview" with the Examiner, and states that the Examiner "withdrew the rejection of the claims but without any relevant or adequate explanation." The trial Court after weighing all of the evidence, found that the Examiner did not act improperly, and that he

did give an adequate reason for allowing the claims, in the following language:

> "He found that in the art of coating with inorganic salts it had not been suggested to heat the elements to an elevated temperature in vacuum and to evaporate the films thereon while the elevated temperature was maintained in the vacuum. He found that this method was not taught by the prior patents and publications, was not obvious, and the record at the trial fully supports the findings and decision of the Examiner. (Find. of Fact 40, Vol. II, DA 943a, 944a)
>
> "The plaintiff did not misrepresent the state of the art to the Patent Office—. The whole record shows that the representations made by the plaintiff were true. The Patent Office Examiner was not improperly induced to allow the claims of the patent in suit." (Find. of Fact 42, Vol. II, DA 944a)

This misstatement in the petition is the final echo of inflammatory and false charges of fraud and collusion which defendant made below against plaintiff and unidentified officials of the Navy Department, alleging that plaintiff obtained his patent by some improper conduct on the part of these officials (Pars. XV and XVI of the Answer, Vol. I, DA 14a, 15a). *These charges were abandoned when defendant's officer Carl Bausch, at the trial, was forced to admit that* they were completely without foundation (PA 82a, 83a).

Petitioner's "Statement of the Case" makes the utterly erroneous statement that defendant's commercial operations which were held to infringe the patent were carried out "without knowledge of any claim to patent rights" by plaintiff (Petition p. 10).

The trial Court found exactly the opposite, as follows: "At the time defendant commenced this commercial work, it was aware that it was producing the method covered by plaintiff's patent" (Find. of Fact 16, Vol. II, DA 936a).

In petitioner's "Statement of the Case," it is further stated that the trial Court in upholding the patent had found "it required invention to see that the glass could be heated and cleaned in the same way and for the same purpose when depositing metal salts" (Petition p. 11, first paragraph). This misstatement has for its purpose to argue that all the plaintiff's method was intended to do was to "clean the glass," whereas the true facts, and as found by both courts below, are that the plaintiff's method was not merely for cleaning, but that it produced hard and durable light-transmitting coatings on the glass. The page of the record (Vol. II, DA 914a) referred to in this paragraph of the "Statement of the Case," has no reference at all to cleaning of the glass and the trial Court made no such finding as is represented. Throughout the trial Court's decision, the plaintiff's invention is referred to as a method which *hardens* the coatings (Find. of Fact 8, Vol. II, DA 932a).

Petitioner's "Statement of the Case" further makes the erroneous statement that a 1931 publication of Dr. Cartwright described the identical process of plaintiff's patent, in the following language (Petition p. 11, par. 2):

> "The District Court found this publication described the identical process . . ."

The exact words of the trial Court are just the opposite from what is asserted, being as follows:

> "This article *does not* disclose any heating in the vacuum as a part of a method to secure films of inorganic salts . . . if this article can be said to suggest the advantages of heating in the vacuum in applying coating of inorganic salts to optical elements, it seems strange that Cartwright himself did not use it." (Vol. II, DA 915a)

In the same paragraph of the "Statement of the Case," (page 11) petitioner states that the Court of Appeals "avoided any reference to this publication." The Court of Appeals specifically stated at the beginning of its opinion (Appendix to Petition, page 2a) that familiarity with the trial Court's opinion, which it adopted, is assumed. The Court of Appeals *did refer to the publications* as follows:

> "Thus, although Lyon's advance lay only in keeping the 'optical surface' itself heated while it was being coated, this had not appeared in any patent *or printed publication* on November 17, 1942" (Appendix to Petition, page 5a).

The paragraph of petitioner's "Statement of the Case" beginning at the bottom of page 11 particularly demonstrates the adroitly misleading nature of the statement. The paragraph starts off with the words "Both Courts found" and then continues with *a single sentence extending for seventeen lines* which weaves in a great variety of argumentative matters which the Court did not find. For example, the Court did *not* find that Cartwright carried on a commercial business in which he employed the "identical process claimed in plaintiff's patent." The trial Court found "the testimony of Cartwright and his wife regarding the use of heating in the vacuum for hardening in his commercial work at Corning prior to Lyon's claimed

invention is vague, uncertain and unsupported by any documentary evidence . . . and unpersuasive" (Vol. II, DA 918a). The trial Court further found:

> "Whatever experimental work and commercial work Cartwright may have performed at M.I.T. involving heating in the vacuum in filming with inorganic salts and later at Corning, New York, was sporadic and inconclusive and not of such nature as to invalidate the patent in suit. The evidence with respect to his work both at M.I.T. and Corning, both experimental and in his limited commercial work is uncertain and inconsistent. He did not realize any exceptional advantages which would accrue from using heat in the vacuum because he never did isolate the step of heating in the vacuum from other steps which he employed. He did some coating with these films of inorganic salts on a limited basis in his home but the evidence shows that he used his post-baking process mainly." (Find. of Fact 31, Vol. II, DA 940a).

The trial Court *did not find* that Cartwright followed a practice of "unrestricted disclosure to others" as represented in this paragraph of the "Statement of the Case," but found as follows:

> "Whenever Cartwright had opportunity to demonstrate his method, he used post-baking. *He enjoined his associates* at M.I.T. *to secrecy* with respect to any benefits which might result from the method of heating in the vacuum and Clark maintained any knowledge he had on this subject in secrecy, and withheld it . . . from the United States Navy when he was sent to Pearl Harbor in 1942 to assist in coating the optics of submarines which were coming in from combat. As a result, the optics of these periscopes were soft and unsuitable." (Find. of Fact 32, Vol. II, DA 941a)

> "The suppression of whatever Cartwright had discovered regarding the use of heating in the vacuum *was due to his own efforts to withhold it from public knowledge* and to his own failure to disclose it in his work at Naval Research Laboratory when he was under contract for compensation to give the United States Navy the benefit of whatever knowledge he had . . ." (Vol. II, DA 919a)

On the last page of petitioner's "Statement of the Case" (Petition p. 13), it is stated that the Court of Appeals "brushed aside or ignored the proofs of lack of novelty and invention . . ."

The Court of Appeals specifically pointed to the novelty of the invention, and in respect to the accepted test of obviousness stated:

> "We do not see how any combination of evidence could more completely demonstrate that, simple as it was, the change had not been obvious to a person having ordinary skill in the art." (Appendix to Petition, pages 10a, 11a)

Contrary to the representations of the petition, the true facts material to this Court's consideration of the case, as found by the trial Court, are summarized:

1. There *was* a serious problem existing in this industry over a long period of years, same being the soft and fragile nature of the light transmitting films.

2. The greatest companies and laboratories working intensively on the problem, such as defendant Bausch & Lomb, Eastman Kodak Co., General Electric Co., and others, had failed to solve the problem.

3. The most skilled scientists working in the industry over a period of years, such as Dr. Turner

of defendant Bausch & Lomb, Dr. Hewlett of General Electric Co., Dr. Cartwright of M.I.T. and Corning, and Drs. McLeod and McRae of Eastman Kodak Co. had worked intensively on the problem but *had failed* to find the solution.

4. The plaintiff in 1941, while a minor government employee, succeeded by his discovery after these great corporations and laboratories had failed.

5. The plaintiff's solution *was novel* and *was not anticipated* by prior patents, publications, nor by the experiments of the leading scientists working in the art.

6. The plaintiff's discovery was not obvious but was outstandingly inventive in character.

7. The plaintiff's invention was applied with great success by the Navy and Army during the war, contributed substantially to the winning of the war, and supplanted all other methods and has been adopted by the entire industry.

8. The greatest optical companies, including defendant Bausch & Lomb and Eastman Kodak Co. by their actions recognized the importance of the invention and even unjustly claimed credit for having originated it.

9. Both of these companies derived the invention directly from the plaintiff and not from the prior art nor from their own intensive efforts to solve the same problem.

10. The defendant Bausch & Lomb deliberately appropriated the plaintiff's invention while knowing that it was a development made by the plaintiff and the subject of patent rights which it deliberately violated.

The Court of Appeals unanimously adopted these findings and in deciding the only real issue before it, stated:

> "The most competent workers in the field had for at least ten years been seeking a hardy, tenacious coating to prevent reflection; there had been a number of attempts, none satisfactory; meanwhile nothing in the implementary arts had been lacking to put the advance into operation; when it appeared, it supplanted the existing practice and occupied substantially the whole field. We do not see how any combination of evidence could more completely demonstrate that simple as it was, the change had not been 'obvious . . . to a person having ordinary skill in the art.'" (Appendix to Petition, page 10a)

It is evident from the trial Court's opinion and Findings that the plaintiff's patent satisfied the strictest test of invention. The only question before the Court of Appeals was the validity of the patent, and whether or not the trial Court's findings were supported by substantial evidence. The Court of Appeals unanimously adopted the findings of the trial Court, while specifically recognizing the unprecedented completeness of the evidence demonstrating that plaintiff's discovery was not obvious.

Petitioner's principal ground for certiorari is that there is conflict with decisions of this Court and other Courts of Appeals because they require "a more strict determination of what would have been obvious to one of ordinary skill in the art" (Petition, page 14, last par.). It is submitted that no such conflict exists when the true facts and findings on invention in this case are considered. The facts as found satisfy invention under the severest test, whether it be that of the

applicable 1952 Patent Act, or the case law of the last 20 or 25 years, or the case law of the past 100 years.

PETITIONER'S "QUESTIONS" ARE NOT PROPERLY PRESENTED BY PLAINTIFF'S PATENT AND THE TRUE FINDINGS BELOW

Petitioner's "Questions" 1 and 2 are not supported by any *real* conflict either with respect to the particular patent in suit or important principles of federal law. Aside from their objectionably broad and indefinite nature, such questions can only be properly presented to this Court in a situation where a patent has been held *invalid* for lack of invention *prior* to the 1952 Patent Act and *valid after* the date of that Act.

The claims of the Lyon patent whose validity the petitioner seeks redetermination of, have never been held invalid by any Court. They were considered by both the trial Court and the Court of Appeals after the date of the 1952 Patent Act. They were held valid by all the judges of both Courts on findings which establish invention under the strictest test.

The Supreme Court has stated that judicial tribunals should not give opinions on abstract or hypothetical propositions. *Heitmuller* v. *Stokes,* 256 U.S. 359, 362, 41 Sup. Ct. 522, *Pelham* v. *Rose,* 76 U.S. (9 Wall) 103.

These questions rely on general obiter dicta observations of the Court of Appeals, on the trend of patent case law over an indefinite period of years preceding the 1952 Patent Act, which were not a part of and not necessary to the holding of validity which was made. The only question which was before the Court of Appeals was the validity of the claims of the patent under the now applicable law. Their unanimous decision was that the claims were valid and met the test of invention. The general observations of the opinion on what the fate of this patent *might* have

been *if* it had reached the Courts in some earlier period of years are speculative, were not necessary for the determination of the case, and did not establish that type of "real" conflict for a review on certiorari. This Court has not deemed a "conflict" in the general statements in opinions of different Courts to be such a "conflict of decision" as to warrant the grant of certiorari, and many petitions for certiorari that have relied upon verbal differences in the standards of patentability in the *opinions* of the Courts of Appeals have been denied. There must be a "real and embarrassing conflict" as to the validity of particular claims. *Layne & Bowler Corp.* v. *Western Well Works,* 261 U.S. 387, 388, 67 L. Ed. 712; *Keller* v. *Adams-Campbell Corp.,* 264 U.S. 314, 319, 68 L. Ed. 705.

Petitioner's Questions 3 and 4 merely dispute the findings of fact of the courts below. The petitioner does not even attempt to point out why it feels the true findings below are not supported by the evidence, but seizes upon a few words out of context in the opinion below, and uses them to argue that the findings were to an effect opposite to what they really were. The Supreme Court is not a court for correction of errors in fact finding, and does not undertake to review concurrent findings of fact by two courts below in the absence of a very obvious and exceptional showing of error. *Graver Tank & Mfg. Co.* v. *Linde Air Products Co.,* 336 U.S. 271, 93 L. Ed. 672, 678; *Goodyear Tire & Rubber Co.* v. *Ray-O-Vac,* 321 U.S. 275, 88 L. Ed. 721; *District of Columbia* v. *Pace,* 320 U.S. 698, 88 L. Ed. 408; *Williams Mfg. Co.* v. *United Shoe Corp.,* 316 U.S. 364, 86 L. Ed. 1537; *Baker* v. *Schofield,* 243 U.S. 114, 118, 61 L. Ed. 626, 630; *General Talking Pictures Corp.* v. *Western Electric Co.,* 304 U.S. 175,

178; 82 L. Ed. 1273. Rule 52 (a) of the Federal Rules of Civil Procedure is particularly applicable to this case where the evidence is largely the testimony of experts and where the trial Court wrote a careful opinion and made findings covering all the factual issues, *Graver* v. *Linde, supra.*

Question No. 1

In addition to being objectionably broad and indefinite, this question is based on an assumption supported only by the erroneous representations of petitioner's "Statement of the Case," that plaintiff's discovery was found to be lacking in novelty and obvious.

In a petition for rehearing to the Court of Appeals, defendant stated the same question in the words—"Did the New Code Sections 101-103*—reduce the standard of patentable novelty and invention to such lowly and vanishing level *as to confer patentability upon the specifically old, analogous and obvious step* of heating the optical surface to clean it while being coated in the vacuum with any "suitable coating material—."

There were no findings by any Court or judge that plaintiff's discovery was not novel or that it was obvious. No judge or Court has held plaintiff's patented method to be invalid for lack of invention. All judges who have passed on this discovery have held the method to be a patentable invention.

The Court of Appeals properly weighed plaintiff's discovery by the test of invention of the 1952 Patent Act (Sec. 103). The parties are in agreement that the 1952 Patent Act is applicable. The Court of Appeals found plaintiff's discovery met the test of that Act

* 35 U.S.C. Sec. 101-103.

to a striking degree, and that it did not "see how any combination of evidence could more completely demonstrate that—the change had not been 'obvious' ", and stated its agreement with the trial Court's "searching and comprehensive analysis" which found facts establishing invention under the strictest test.

The general observations of Judge Hand about the trend of unidentified cases on the law of patentable invention over a period of one hundred years, were not necessary to the Court's unanimous decision affirming the findings of the trial Court. The only question before the Court of Appeals was the validity of the claims under the 1952 Patent Act, and whether the findings establishing invention were based on substantial evidence. The general observations and speculations in the opinion about the trend of unidentified cases on other patents in twenty-five years preceding the Act, as compared with the trend in a seventy-five year earlier period, are mere obiter dicta.

The plaintiff's patent does not present a case for comparing the trend of case law in one period of years with that in another, in order to now determine and at this early date if the 1952 Patent Act has wrought a change.

Question No. 2

This question in effect asserts that past decisions of the Supreme Court on invention gave the defendant Bausch & Lomb as a matter of "right", the license to infringe plaintiff's lawfully issued patent and to appropriate his property without compensation.

As the evidence and findings below show, defendant Bausch & Lomb is a leading company in the optical industry. In contrast, plaintiff Lyon is an individual

inventor who made his discovery as a government employee at the Naval Gun Factory.

Defendant Bausch & Lomb gained knowledge of plaintiff's invention under confidential circumstances and for the limited purpose to use same in work for the government (Find. of Fact 45, Vol. II, DA 945a). Defendant Bausch & Lomb not only knowingly appropriated the commercial fruits of plaintiff's invention, but publicly claimed credit for its development while knowing it belonged to plaintiff (Find. of Fact 15, Vol. II, DA 935a). Defendant assumed the "right" to appropriate the invention *without compensation,* and refused to take a license and to pay even a nominal royalty for its use of the invention, and by this position which it took, caused other optical companies to refuse to take such a license (Find. of Fact 16, 17, 19, Vol. II, DA 936a, 937a).

The petition presents this and the other "Questions" as matters of public interest. If the public needs protection against lone inventors, it would be better that its interests should be presented by other than a great corporation found guilty of the kind of arrogant greed which is established by the undisputed findings referred to above.

It is presumptuous for defendant to argue that the past decisions of this Court on invention should be construed to encourage such disregard of the property of others, and to assert that this Court's decisions established a "right" in defendant to commit and compound the tort of infringement.

There was no "period of invalidity" of the Lyon patent prior to the 1952 Act as assumed by Question No. 2 of the petition. The patent was prima facie valid by reason of its grant; the burden of establishing

invalidity is one which the infringer must assume (35 U.S.C. Sec. 282). Whoever uses a patented invention during the term thereof and without authority infringes the patent (35 U.S.C. Sec. 271).

There is no *"right"* to infringe recognized in any statute nor in any decision of this Court or of the Courts of Appeals.

This defendant boldly asserts by its petition that the decisions of this Court condone and authorize willful appropriation without compensation of property rights recognized by the Constitution and laws of the United States. The defendant would misconstrue and misuse the decisions of this Court to escape accountability for its calculated appropriation of plaintiff's property without compensation.

Question No. 2 is not a proper question for determination by this Court, because of its objectionable generality and indefiniteness as argued above with respect to Question No. 1, because of its contingent nature (as based on Question No. 1) *White* v. *Johnson,* 282 U. S. 367; 75 L. Ed. 388, and because of its erroneous assumption that there are findings establishing that plaintiff's patent was invalid at some period prior to the 1952 Patent Act.

Question No. 3

This question is confected by stating as facts things which were not found by the Courts below, as previously discussed. It erroneously alleges that the method of plaintiff's patent was merely for "cleaning the glass" to produce "a known coated product", i.e., that it was the same as methods used for this purpose in forming prior art reflecting coatings of metals. The question erroneously states the facts as though the

method was found to be old, but that it had been held to be patentable only as a new use under Section 100 (b) of the 1952 Patent Act (35 U.S.C., Sec. 100(b)).

The Courts below did *not* find that plaintiff's method is for "cleaning" the glass, but found that it accomplished a *hardening* of the light-transmitting coatings as had never been known before in the art, and that the claims define a *new method.*

The trial Court found that "plaintiff's method of hardening the coated optical surface provided an improved, durable and tenacious coating such as had never been obtained by prior patentees." (Vol. II, DA 913a). The trial Court referred to plaintiff's process as "a distinct advance in the art" and stated: "Plaintiff's disclosure was addressed to the problem of soft coatings, coatings too fragile to permit their use in general application and in the optical industry because of the risk of damage to the coatings from ordinary usage and handling and atmospheric conditions. Plaintiff's method of *hardening* was a successful solution of the problem." (Vol. II, DA 914a)

The trial Court found that the problem of the prior art was "lack of hardness" of the coatings, that persons most skilled in the art had not discovered that unusual results could be obtained in securing the *harder* films by practicing the method of the patent in suit (Find. of Fact 7, Vol. II, DA 932a), and that plaintiff's discovery was the providing of "coatings of much greater hardness and durability" than had been obtained in prior practices (Find. of Fact 8, Vol. II, DA 932a).

The trial Court found that plaintiff's discovery was a method which was "the first to produce transmission

type inorganic salt coatings of such consistent hardness and durability as to permit mass production—although the need for such hard and durable coatings had been apparent for many years" (Find. of Fact. 11, Vol. II, DA 934a), and that the patent in suit "defines *a new and useful method or process*" (Find. of Fact 43, Vol. II, DA 944a).

The Court of Appeals found the plaintiff's method to be novel and not found in the prior art (Appendix to Petition, pages 3a-5a). With respect to the novelty of the result and product, the Court of Appeals noted the prior art coatings were not hard, but that they "could be readily scratched or even rubbed off" (Appendix to Petition, page 6a).

Question No. 3 states that the Courts below held plaintiff's method was the same as the old processes "with known and *analogous* materials." The trial Court specifically held exactly the opposite, stating, "There is no general equivalence between salts and metals" (Find. of Fact 38, Vol. II, DA 943a). This finding was based on the examination of defendant's expert Dr. Cartwright, who testified that the salts and metals "are sufficiently tricky" so that it is not absolutely predictable how one will act as compared with another, that even all metals did not act alike as far as reaction to distillation is concerned, and that in the use of heat, one could not predict from one metal to another, and that there would be a similar uncertainty between metals and inorganic salts (Vol. I, DA 177a, 178a). The plaintiff also testified that metals and inorganic salts are not analogous (Vol. I, DA 68a).

Thus, the allegations in Question No. 3 of petitioner's "Statement of the Case", are based upon

assumptions and inaccurate statements which are diametrically opposed to what was found by the Courts below. The allegations in Question No. 3 that there was no problem, that plaintiff's method was not novel, and did not solve a problem and did not produce a new result, are entirely inaccurate and misleading.

Because Question No. 3 is not based on the real facts, but on an assumed and erroneous statement of the facts, it does not properly present a question for decision by this Court. The Supreme Court does not undertake to redetermine technical questions which have been already decided by concurrent findings of the Courts below.

Question No. 4

This question, like Question No. 3, merely presents petitioner's argument and disagreement with the facts as actually found by the Courts below.

The question erroneously assumes findings that Dr. Cartwright had carried out a "successful and commercial practice" of the plaintiff's method prior to the latter's discovery, and asserts that the Courts below disregarded his work merely because he had not brought the invention "to light in the art" nor "urged its adoption," by widespread publication, or because his use was only in "small volume."

These assumptions and arguments are not supported by the findings of the trial Court, nor by the opinion of the Court of Appeals. The true findings were based on all the evidence including the open court testimony of Dr. Cartwright who was examined for two full days at the trial, the testimony of his wife, the records of

his commercial activities which disclosed only the use of his post-baking method, the testimony of his associate Clark and others, and his published articles and patents.

These findings establish that Dr. Cartwright *did not* possess the knowledge that plaintiff's method would produce the sought for harder coatings of the light transmitting type. They establish that *he did not* complete the invention prior to plaintiff's discovery. The trial Court found:

> "The testimony of Cartwright and his wife regarding the use of heating in the vacuum for hardening in his commercial work at Corning *prior to Lyon's claimed invention* is vague, uncertain, unsupported by any documentary evidence (although there is documentary evidence of post-baking), and unpersuasive. This proof of anticipation does not measure up to the quality of proof required to defeat a patent.—On all the evidence regarding Cartwright's experiments, and his work with heating in the vacuum for hardening evaporated coatings, I conclude that Cartwright did not appreciate the benefits of heating in the vacuum, and that any such use by him was sporadic and inconclusive as to any definite advantages obtainable." (Vol. II, DA 918, 919a)

It is noteworthy that the trial Court in particular was not persuaded by the evidence of Dr. Cartwright's activities *prior* to plaintiff Lyon's invention.

The trial Court also found that while Cartwright had experimented with the step of heating in the vacuum *in conjunction with other steps,* he had never isolated it from the other steps such as his post-baking

method which he had concluded was the solution to the problem. The trial Court found:

"The evidence with respect to his work both at M.I.T. and Corning, both experimental and in his limited commercial work is uncertain and inconsistent. He did not realize any exceptional advantages which would accrue from using heat in the vacuum because he never *did isolate the step*— from other steps which he employed—." (Find. of Fact 31, Vol. II, DA 940a)

" — Dr. Coolidge (one of Hewlett's associates at General Electric) had written to Cartwright's representatives to find out the details of Cartwright's procedure —. The reply — was a short communication stating the essential points to be (1) pre-heating; (2) post-baking; (3) cooling the glass and the immediate application of a waterproofing agent. *No reference was made to the use of heat in the vacuum.* This was immediately prior to Cartwright's employment at the Naval Research Laboratory. Cartwright had previously used heating in the vacuum *along with his post-baking* and had so informed Hewlett in November, 1939. Cartwright's reply referred to in Hewlett's diary lends support to the conclusion that Cartwright did not properly evaluate the advantages of heating in the vacuum and that by July of 1940, *he also had abandoned its use.*" (Vol. II, DA 921a)

"I am not persuaded by the evidence that Cartwright concealed or withheld the idea and use of heating in the vacuum for hardening *with knowledge* that that was the best method for obtaining hard and rugged coatings. I think rather that whatever experiments he had conducted along that line and whatever occasional use he had made of it in his commercial work *had convinced him that it was inferior* in results to his own patented post-baking method —. His testimony at the trial

> leaves no doubt about the fact that he is still uncertain whether one 'could not get as hard a film if you left out the actual heating in the vacuum.' *And he admitted in his testimony at the trial* that *that was the way he felt about it in 1940 and 1941.*" (Vol. II, DA 919a, 920a)

The Court of Appeals observed that Cartwright had "abandoned his discovery as soon as it emerged from the stage of experiment" and specifically stated its agreement with the findings of the trial Court in respect to Cartwright's work, making reference to Cartwright's testimony at the trial (Appendix to Petition, page 9a). The Court of Appeals stated:

> "He did indeed test it out to his satisfaction; and when he had done so, he concluded it *would not* do what he was after. It *did not* produce a more 'rugged' film and he gave it up. It was in effect an abandonment; it did more than fail to advance the art; *it put the process among those efforts that are proved useless.* All the reasons that have made the courts refuse to treat experimental users as anticipations, apply even more convincingly; it is not alone that such activities are not evidence of anticipation, they are evidence against. — We conclude therefore with Judge Burke that Cartwright neither put the process to 'public use,' nor was he its prior inventor." (Appendix to Petition, page 10a)

The last paragraph on page 22 of the petition is characteristic of the whole petition in its misstatement of the findings below. This paragraph states as a finding of the trial Court, that Cartwright reduced the invention to practice successfully, and used and disclosed it to others "without secrecy."

The trial Court actually found with respect to Cartwright's work:

> "Clark complied with Cartwright's request, and although employed at National Research Corporation until October, 1942, he never used nor disclosed any method for hardening except post-baking. His *calculated suppression* of the idea and of the use of heating in the vacuum *was directly attributable to Cartwright's request* to Clark not to divulge the idea because Cartwright did not want it to be known publicly." (Vol. II, DA 917a)
>
> " — *the suppression* of whatever Cartwright had discovered regarding the use of heating in the vacuum was due to *his own efforts to withhold it* from public knowledge —." (Vol. II, DA 919a)
>
> "*He enjoined his associates at M.I.T. to secrecy*—and Clark maintained any knowledge he had on this subject in secrecy —." (Find. of Fact 32, Vol. II, DA 41a).
>
> "Whatever knowledge he may have had from heating in the vacuum *he maintained in secrecy.*" (Find. of Fact 34, Vol. II, DA 941a)
>
> "Whatever he did discover regarding the use of heating in the vacuum *was withheld from public knowledge* through the affirmative steps taken by Cartwright. These affirmative steps were taken by Cartwright because he had failed to appreciate the advantages obtainable by heating in the vacuum." (Find. of Fact 34, Vol. II, DA 942a)

A further example of stubborn misstatement of the findings below appears in the second paragraph, page 23 of the petition. It is there stated with respect to Cartwright's work that the Court of Appeals "con-

cluded that this was a public use of the claimed invention from 1939 on."

The Court of Appeals stated its affirmance of the District Court's findings as follows:

> "We conclude therefore with Judge Burke that Cartwright neither put the process to 'public use,' nor was he its prior inventor." (Appendix to Petition, page 10a)

In Summary, Question No. 4 merely presents petitioner's disagreement with the facts as found by the Courts below, and misrepresents these findings. The Supreme Court does not grant certiorari to redetermine involved questions of fact which have been weighed and determined by concurring findings of the Courts below.

THE FINDINGS BELOW ESTABLISH THAT PLAINTIFF'S DISCOVERY SATISFIED THE MOST RIGID TEST OF INVENTION

The invention of the patent in suit was weighed by the trial Court under the law which governed at the time of its decision, the 1952 Patent Act. That Act (Sec. 103) states the test of invention to be whether "the subject-matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art . . . ." This test of invention was not new with the 1952 Patent Act, but was incorporated therein, in the language of the report of the House "with the view that an explicit statement in the statute may have some stabilizing effect,* . . . ." This test of invention was applied in many leading cases prior to the 1952 Patent Act by

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* Discussed in Channel Master Corp. v. Video Television, Inc., 117 F. S. 812, 815, D.C.N.Y. 1953.

the Supreme Court and the various Courts of Appeals, over a long period of years, and including the twenty or twenty-five year period prior to the 1952 Patent Act.

In *Goodyear Tire & Rubber Co.* v. *Ray-O-Vac Co.*, 321 U.S. 278, 279; 88 L. Ed. 721, 723, 724, decided in *1944,* this Court upheld the validity of a patent on findings of the trial Court which had been affirmed by the Court of Appeals. The Supreme Court made reference to the trial Court's findings "that the problem presented was old and no solution was attained prior to Anthony's invention . . . that the cell met with immediate commercial success due to the advantages of its construction . . .," and "that its advantages were recognized by the Army and other governmental agencies." The Court then said:

> "Viewed after the event, the means Anthony adopted seemed simple and such as should have been obvious to those that worked in the field, but this is not enough to negative invention. * * * the manufacturers of flashlight cells were conscious of the defects in them, no one devised a method of curing such defects. Once the method was discovered it commended itself to the public. * * * Accepting as we do, the findings below, we hold the patent valid and infringed."

Application of this accepted test of invention involves consideration of *what actually happened in the art or industry,* to ascertain if a problem existed which defied solution over a substantial period of time and if the patentee solved the problem where others had failed, in order to determine whether or not his solution was an "obvious" one.

That the test was applied in the Second Circuit before the 1952 Act is evident from the language from

Landis Machine Co. v. *Parker-Kalon Corp. et al.*, 190 F. 2d 543, 545 (C.A. 2 1951) where the Court said:

> "* * * if Lloyd's combination of these disclosures resolved a want which had been felt all along: that is, if it swept the board; there would be reason to conclude that his discovery was beyond the capacities of ordinary qualified members of the craft."

That the test was applied in the Second Circuit after the 1952 Act, is apparent from the following language from *Channel Master Corp.* v. *Video Television*, 117 F. S. 812, 815 (D.C. E.D. New York, 1953):

> "This is not a situation where the alleged improvement was seriously needed in the industry, and although desparately sought after, remained undiscovered for a long period of time."

The trial Court's findings in this suit establish that this test of invention was satisfied to a striking degree. The formidable array of witnesses brought forward by defendant Bausch & Lomb in its efforts to defeat plaintiff's patent told the whole history of this art and industry. The trial Court heard the testimony of scientists *which both parties admit were the most active and most skilled in the art.* The trial Court found there was a problem which resisted intensive efforts of the most skilled to solve it, including the efforts of the greatest laboratories in the country.

It is significant that an individual inventor solved the problem after the failures of the great corporations and laboratories, and that his discovery was found by the Courts below to satisfy the exacting test of invention.

In *Graver Tank & Mfg. Co.* v. *Linde Air Products Co.*, 336 U.S. 271, 274, 275; 93 L. Ed. 672, 676, 677, decided in 1949, this Court upheld the validity of claims of a patent based on findings of the trial Court in the seventh circuit, noting the provisions of Rule 52a of the Federal Rules of Civil Procedure that such findings should not be set aside unless clearly erroneous, and that due regard shall be given to the opportunity of the trial Court to judge the credibility of the witnesses. The Supreme Court stated that this rule is particularly applicable where the testimony below was largely that of experts, and where the trial Court had written "a careful and succinct opinion and made findings covering all the factual issues."

In *Faulkner* v. *Gibbs,* 338 U.S. 267, 268; 94 L. Ed. 62, decided in 1949, the Supreme Court upheld the validity of a patent, based upon concurrent findings of invention by the two Courts of the ninth circuit below.

Petitioner has failed to even argue that the true findings of the trial Court, in the present case, are not supported by substantial evidence, but has based its petition on assumed and erroneous findings.

The test of "obviousness" to determine the presence of invention has been applied in the various circuits over a long period of years and including the past twenty or twenty-five years, as indicated by the following cases:

Lincoln Stores v. *Nashua Mfg. Co.*, 157 F. 2d 154, 163 (C.A. 1), July 19, 1946, (Cert. Den. 329 U.S. 811).

Grant Paper Box Co. v. *Russell Box Co.*, 154 F. 2d 729, (C.A. 1) 1946 (Cert. Den. 329 U.S. 741).

Brown & Sharp Mfg. Co. et al v. *Kar Engineering Co., Inc.,* 154 F. 2d 48, 52, (C.A. 1) 1946, (Cert. Den. 328 U.S. 869).

United Chromium, Inc. v. *International Silver Co.,* 60 F. 2d 913, 916 (C.A. 2), July 29, 1932 (Cert. Den. 288 U.S. 600).

B. G. Corporation v. *Walter Kidde & Co., Inc.,* 79 F. 2d 20, 22, (C.A. 2) July 1, 1935.

Hayes et al v. *Surface Combustion Corporation,* 96 F. 2d 61, 64, 65, (C.A. 2), April 4, 1938.

Union Carbide & Carbon Corp. v. *Stuart Laboratories,* 194 F. 2d 823, 824, 825, (C.A. 3), 1952 (Cert. Den. 343 U.S. 967).

Procter & Gamble Mfg. Co. v. *Refining Inc.,* 135 F. 2d 900, 908 (C.A. 4) 1943.

Florence-Mayo Nuway Co. v. *Hardy et al.,* 168 F. 2d 778, 780-782 (C.A. 4) 1948.

O. K. Jelks & Son et al v. *Tom Huston Peanut Co.,* 52 F. 2d 4, 7, 8 (C.A. 5), August 24, 1931, (Cert. Den. 284 U.S. 686).

Jeoffroy Mfg. Co. v. *Graham,* 206 F. 2d 772, 774, 776 (C.A. 5) 1953 (Cert. Den. 347 U.S. 920; Rehearing Den. 347 U.S. 940).

Guiberson Corp. v. *Garrett Oil Tools, Inc.,* 205 F. 2d 660, 663, 665 (C.A. 5), 1953 (Cert. Den. 346 U.S. 886; Rehearing Den. 346 U.S. 917).

Forestek Plating & Mfg. Co. v. *Knapp-Monarch Co.,* 106 F. 2d 554, 557, 558, (C.A. 6), Sept. 18, 1939.

Kelley-Koett Mfg. Co. v. *McEuen,* 130 F. 2d 488, 492 (C.A. 6) 1942, (Cert. Den. 318 U.S. 763).

Adler Sign Letter Co. v. *Wagner Sign Service,* 112 F. 2d 264, 267 (C.A. 7), 1940 (Cert. Den. 311 U.S. 692).

Delta Mfg. Co. v. *E. L. Essley Machinery Co.,* 153 F. 2d 905, 906, (C.A. 7), February 28, 1946 (Cert. Den. 328 U.S. 867).

National Slug Rejectors v. *A.B.T. Mfg. Corporation,* 164 F. 2d 333, 335 (C.A. 7), Oct. 17, 1947 (Cert Den. 333 U.S. 832; Rehearing Den. 333 U.S. 850).

Ric-Wil Co. v. *E. B. Kaiser Co.,* 179 F. 2d 401, 404 (C.A. 7), January 5, 1950, (Cert. Den. 339 U.S. 958).

Sbicca-Del Mac, Inc., et al v. *Milius Shoe Co.,* 145 F. 2d 389, 394, 395 (C.A. 8), Nov. 18, 1944.

General Motors Corporation v. *Kesling,* 164 F. 2d 824, 827, 829 (C.A. 8), Dec. 17, 1947 (Cert. Den. 333 U.S. 855; Rehearing Den. 333 U.S. 870).

Willis v. *Town et al.,* 182 F. 2d 892, 895 (C.A. 8), June 27, 1950.

Johnson Co v. *Philad Co., et al.,* 96 F. 2d 442, 444 (C.A. 9), May 4, 1938.

Patterson-Ballagh Corp v. *Moss,* 201 F. 2d 403, 406 (C.A. 9), January 27, 1953.

Skinner Brothers Belting Co. v. *Oil Well Improvements Co.,* 54 F. 2d 896, 898, (C.A. 10), 1931.

Dow Chemical Co. v. *Williams Bros. Well Treating Corporation,* 81 F. 2d 495, 496 (C.A. 10), Jan. 10, 1936, (Cert. Den. 298 U.S. 690).

Williams Iron Works Co. v. *Hughes Tool Co.,* 109 F. 2d 500, 510, (C.A. 10), Jan. 13, 1940.

Harris v. *National Machine Works,* 171 F. 2d 85, 88 (C.A. 10), Nov. 18, 1948 (Cert. Den. 336 U.S. 905; Rehearing Den. 336 U.S. 929).

Oliver United Filters v. *Silver,* 206 F. 2d 658, 664, (C.A. 10), July 23, 1953, (Cert. Den. 346 U.S. 923).

Levin v. *Coe,* 132 F. 2d 589, 596 (C.A.D.C.) Nov. 2, 1942.

CONCLUSION

It is respectfully submitted that the petition should be denied for the following reasons:

(a) The discovery of plaintiff's patent was held to be a patentable invention by strong findings of the trial Court which were affirmed by the Court of Appeals. The petition makes no effort

to show that these findings were not supported by substantial evidence.

(b) No conflict of decisions is presented, for plaintiff's patent has never been held invalid for lack of invention by any Court.

(c) No conflict on important questions of federal law is presented, for the affirmed findings established invention under the test applied by the Courts for many years, as well as satisfying the now applicable test of invention of the 1952 Patent Act.

(d) Plaintiff's discovery was an invention which greatly and directly benefitted the public by contributing substantially to the success of our Armed Forces in the last war.

(e) The "Statement of the Case" of the petition does not present the material facts as required by Rule 23-1 (e). It so inaccurately misstates the findings of the Courts below as to justify denying the petition under Rule 23-4 of this Court.

Respectfully submitted,

JOHN W. MALLEY,
C. WILLARD HAYES,
730 Fifteenth St., N.W.,
Washington 5, D. C.
Attorneys for Respondent.

APPENDIX

APPENDIX

(910a)*

Opinion (Decision)

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF NEW YORK

Civil Action No. 4168

DEAN A. LYON, 1821 P Street, S. E., Washington, D. C., *Plaintiff*,

v.

BAUSCH & LOMB OPTICAL Co., 626 St. Paul Street, Rochester 2, New York, *Defendant*.

Decided December 31, 1953.

B. Edward Shlesinger, Rochester, N. Y., Attorney for Plaintiff; Cushman, Darby and Cushman, Washington, D. C.; John W. Malley, C. Willard Hayes, of counsel.

Edward H. Cumpston, Rochester, N. Y., Attorney for Defendant; G. A. Ellestad, of counsel.

This case involves a claim for damages based upon the alleged infringement of plaintiff's patent No. 2,398,382 on a method for applying hard, durable, low-reflecting films of inorganic salts on the surfaces of optical elements. At the trial the complaint was amended to add a claim for damages for unjust enrichment. The invention covered by the patent is an improvement in the art of applying a stable, water-insoluble, evaporated, inorganic salt coating (notably magnesium fluoride) on the surfaces of optical elements. Prior to the invention optical elements had been coated with such materials but the coatings had not been consistently rugged and durable. Handling, usage, and climatic conditions had tended to damage or

* The trial Court's opinion and findings are for convenience hereinafter reprinted from Volume II of Defendant-Appellant's appendix in the Court of Appeals, with the "DA" page numbers (910a-947a) from that appendix being indicated.

remove the coatings. The plaintiff's method provides for the formation of a consistently hard, durable and tenacious coating by heating the optical surfaces to an elevated temperature while they are in a vacuum chamber, such as a bell jar, and in evaporating suitable inorganic salts to the optical surfaces in the vacuum chamber while the surfaces are maintained at an elevated temperature. The need for such rugged coatings had been felt in the art since the time it was first learned that such evaporated coatings would add to the efficiency of optical elements. The lack of consistent ruggedness of the coatings had imposed inherent limitations on their use in the

industry. It had been generally regarded as necessary to limit the use of coatings to inside surfaces where they were protected from handling and to leave the outside surfaces uncoated because of the risk of damage to unprotected surfaces. Prior invention had provided means for hardening the coated surfaces by baking the optical elements in air after they had been removed from the vacuum chamber. This method was commonly referred to as post-baking. Prior methods had also been used to pre-heat the optical elements to clean them before they were placed in the vacuum chamber. Means had also been used to get a completely clean condition within the vacuum chamber by creating an electrical discharge in the vacuum chamber, known as "glow discharge." All of such prior methods left much to be desired in respect to the quality of ruggedness and durability of the coated surfaces.

In the latter part of 1940 the Naval Gun Factory at Washington was interested in putting into production on a mass scale the coating of optical elements for the Navy. It had been discovered by naval authorities from examination of a German bombsight in 1940 that the Germans had been coating optical elements for at least 5 years. The plaintiff had had some experience in the technique

of applying coated films in vacuum. He was hired as a civilian employee at the Naval Gun Factory to develop for the Navy a program in setting up the production of coated optical elements for Navy use. He reported for work in January of 1941. After experimenting with the known methods of hardening evaporated films he concluded that the films so produced were too soft for Navy use. During the course of his experiments at the Naval Gun Factory in June of 1941 he hit upon the idea of heating the optical elements to be coated in the vacuum chamber and maintaining the heated condition of the elements while the evaporated coating was being applied in the

vacuum. Further experiments along this line convinced him that the use of this method of hardening the coatings provided consistent hardness and adherence of thin films so applied. After repeated tests for hardness and durability, and after the application of the process to actual optical instruments such as binoculars and submarine periscopes, the method was eventually applied to practically every type of optical instrument used by the Navy. It was also adopted by the War Department for the Army and after the Second World War by the optical industry generally. Plaintiff's application for a patent was filed November 17, 1942. The patent was granted April 16, 1946.

The defendant was engaged during the Second World War in performing contracts with the United States Government for the manufacture of optical instruments for the Army and Navy. In connection with its work under such contracts officials of the defendant visited the Naval Gun Factory in 1942 and inspected the work being done there with the plaintiff's process in the coating of optical elements for the purpose of adopting it in its manufacture of optical instruments for government use under its contracts. As required by its contracts with the Government, it coated optical elements produced for the Gov-

ernment using the plaintiff's method for hardening the coatings. After the Second World War the defendant continued to use plaintiff's method for coating optical elements in its commercial manufacture of optics not made for use of the Government. Plaintiff's offer of a license under his patent to the defendant for its use in its commercial manufacture of optics was rejected. Hence this suit.

Defendant asserts that the patent is invalid for lack of novelty and invention over prior patents cited by the Examiner. Plaintiff's patent specification shows prior knowledge of metallic fluoride reflection-reducing films and the

practice of pre-heating the surface to be coated to improve the tenacity of the film to the surface and to improve the ruggedness of the film itself. It also shows prior knowledge of post-baking in air to improve the tenacity and ruggedness of light transmission films. Heating in the vacuum chamber, while a coating is being evaporated on to the optical surface, had not been disclosed in the art of applying inorganic salts to an optical surface. Darrah (Patent No. 1224339) disclosed coating a hot metal powder such as aluminum or zinc onto a hot metal base such as iron in the presence of a partial vacuum. The coating metal is absorbed into the metal base. Cartwright (Patent No. 2281474) disclosed the method of coating an optical element with a reflection-reducing inorganic salt such as magnesium fluoride by evaporating in vacuum. He follows this treatment in vacuum by post-baking in air to harden the coating. Sabine (Patent No. 2301456) refers by inference to the post-baking in air used by Cartwright. Prior patents (Macksoud No. 2217228 and Birdseye No. 2237328) had disclosed the simultaneous heating and coating of the inside of a lamp bulb in a vacuum with an evaporated metallic coating. These two patents related to the use of metals to form opaque, reflective coatings in a field not related to the art of coat-

ing optical elements. It was not obvious to those working in the field of coating optical elements with thin films of inorganic salts to use the step of heating in the vacuum shown by Macksoud and Birdseye working in a different field with metals. The plaintiff's method of hardening the coated optical surface provided an improved, durable and tenacious coating such as had never been obtained by prior patentees. Plaintiff's process removed the inherent limitations of the use of coated optics to protected surfaces and made such use available for general application, including application to external and unprotected optical surfaces without risk of damage from assembling,

handling, usage and atmospheric or climatic conditions. This was a distinct advance in the art. All of the patents referred to above were considered by the Examiner in the Patent Office. Plaintiff's disclosure was addressed to the problem of soft coatings, coatings too fragile to permit their use in general application in the optical industry because of the risk of damage to the coatings from ordinary usage and handling and atmospheric conditions. Plaintiff's method of hardening was a successful solution of the problem. The presumption of novelty and invention is strengthened since the patents relied on to show lack of invention were considered by the Examiner. There was no showing at the trial that the Examiner was wrong in his conclusion. *J. A. Mohr and Son* v. *Alliance Securities Co.*, 14 F. 2d 799. *Celanese Corp.* v. *Essley Shirt Co.*, 98 F. 2d 895.

Defendant asserts that the patent is invalid by reason of patents, publications, and admissions of the plaintiff at the trial, which material was not before the Examiner. Cartwright (Patent No. 2281475) disclosed both pre-heating the optical surfaces prior to evaporating the coating in the vacuum and post-baking the metallic salt coating. Biggs (Patent No. 2123706) disclosed heating in the vacuum during evaporation of metal on the inside of a

lamp bulb. Fink (Patent No. 1738991) disclosed the use of the same process to coat with metal the inner surface of a thermos bottle to produce a reflective coating. Winkler (Patent No. 1982774) disclosed the same process with metal to coat mirrors. It also referred to post-baking in air and to electrical discharge in vacuum. Long (Patent No. 2236911) also dealt with coatings of metal on mirrors to make a reflective coating. The publication of Burgers & Dipple (1934) is an academic study to determine the structure of films of inorganic salts to determine their structure. Post-baking is referred to. There is no mention of hardness or of the intent to harden the coatings.

(915a)

Cartwright, the patentee in patents already referred to, was co-author with Strong of an article entitled "An Apparatus for the Evaporation of Various Materials in High Vacua." This article was published in "Review of Scientific Instruments," Volume 2, March, 1931. This articles does not disclose any heating in vacuum as a part of a method to secure films of inorganic salts. The reference to the use of heating in vacuum is in connection with the deposition of silver on glass to make a reflective coating. It is significant that Cartwright was still advocating the use of post-baking optical surfaces coated with inorganic salts at the time the plaintiff claims to have made his discovery of heating in vacuum. This was ten years later than the publication of the article above referred to. If this article can be said to suggest the advantages of heating in the vacuum in applying coatings of inorganic salts to optical elements it seems strange that Cartwright himself did not use it. He himself applied for a patent on the inferior and now virtually abandoned method of post-baking long after the publication of the article. Cartwright wrote another article which was published in "Review of Scientific Instruments," Volume One, December, 1930, entitled "Cathode Sputtering." Cartwright admitted in his testimony at the trial

the difference between evaporation coating and sputtering is fundamental and that inorganic salts cannot be applied by sputtering.

The defendant asserts that the patent is invalid because of prior invention, knowledge, use and public use by Cartwright. There is no gainsaying the fact that Cartwright was outstanding in the field of coating optics, nor that he had experimented to discover means of hardening the coatings, nor that the particular process of heating in the vacuum had come to his attention prior to 1941. These admissions pose important questions, i.e., whether Cartwright properly estimated the value of heating in the

vacuum to harden the coatings, and if he did properly estimate its value, whether he brought it to light in the art and urged its adoption. In November, 1939, Cartwright was an instructor at Massachusetts Institute of Technology in the field of physics. As early as November 8, 1939, he had devised a crude apparatus consisting of a metal plate with grooves to receive glass lantern slides to be coated. The plate was heated to various temperatures. Glass slides were inserted in the grooves in contact with the hot metal plate, which was then suspended in a vacuum chamber. By this means the heat of the glass slides was preserved in the vacuum while evaporated coatings of inorganic salts were applied to the slides. The results of Cartwright's experiments with this apparatus were reported in a letter by Cartwright to Mr. Carroll Wilson of Research Corporation, New York City, dated November 30, 1939. Attached to that letter was another page marked "continued December 4, 1939." This latter page referred to equipment for heating glass by radiation while the glass was being treated in vacuum. He reported that "this looks like the logical way to treat photographic lenses during their manufacture as well as eye glasses." Research Corporation as assignee was exploiting by licenses certain of Cartwright's patents, in-

cluding his patent covering post-baking, under an arrangement by which the proceeds were used for research and under which Cartwright received some financial benefit. While Cartwright was at M.I.T. he carried on as a side line a small scale commercial business of coating optical elements for persons and corporations who had become familiar with his work. He devised a crude copper oven open at both ends, containing heating coils, designed to heat lenses electrically while under vacuum. This oven would accommodate one or two lenses. In connection with this commercial work he hired a student named Clark to assist him. This commercial work was

carried on in an M.I.T. laboratory when students were not using the laboratory. Clark hardened the coatings by post-baking and on occasions by heating in the vacuum, using the copper oven. This was during the scholastic year ending in May, 1940. Clark was then hired by National Research Corporation, Boston (not to be confused with Research Corporation), in charge of the development of lens coating. He was hired because of his experience in high vacuum work and his knowledge of coating lenses. When he was about to leave M.I.T. to go to National Research Corporation, he had a discussion with Cartwright regarding the method of vacuum heating for hardening coated lenses. Cartwright regarded National Research Corporation as a potential competitor of his in his commercial enterprise. Cartwright told Clark that he wanted to work on the method of heating in vacuum a little more and did not want it to be known publicly at that time (May, 1940). He asked Clark not to divulge this method of coating at that time. Clark complied with Cartwright's request, and although employed at National Research Corporation until October, 1942, he never used nor disclosed any method for hardening except post-baking. His calculated suppression of the idea and of the use of heating in the vacuum was directly attributable

to Cartwright's request to Clark not to divulge the idea because Cartwright did not want it to be known publicly.

In May of 1940, at the particular time that Cartwright expressed to Clark his desire that the idea of heating in the vacuum to harden coatings should not become public knowledge, the Navy was interested in the application of thin films to submarine periscopes. Cartwright left M.I.T. about August 1, 1940, to take a position as the head of the research department at Corning Glass Works. But before commencing his work at Corning Glass Works he was hired under contract with the Navy for compensation to go to the Naval Research Laboratory at Washington

for one month to install for the Navy a technique in coating optical elements and to instruct personnel of the Naval Research Laboratory in the basic principles of high vacuum technique and anti-reflection coatings. He spent the month of August, 1940, at the Naval Research Laboratory in Washington. He took with him vacuum equipment that he had constructed for use in his employment at the Naval Research Laboratory. While there under contract he coated the lenses of a submarine periscope. These coatings were hardened by post-baking only. They turned out to be soft and unsuitable and could be brushed off with a camel's hair brush. As far as hardness was concerned, they were a failure. Cartwright says the reason for their lack of hardness was his inability to secure a good vacuum in the short time that he was employed at the Naval Research Laboratory. It is important to note however that Cartwright did not take to Washington for use in his employment at the Naval Research Laboratory his crudely constructed copper oven or any other equipment designed for use in heating in vacuum for hardening, and that he never intended to use the method of heating the lenses in vacuum for hardening the coatings during his work at the Naval Research Laboratory. At no time during his work there did he ever disclose to

anyone the idea that evaporated coatings could be made more rugged by the use of heating in the vacuum.

Directly after his work at Naval Research Laboratory in August, 1940, he commenced his employment at Corning Glass Works. He supplemented his salary there by continuing his commercial enterprise of coating lenses. This work he did with the assistance of his wife in the basement of his home, and she usually applied the coatings. The testimony of Cartwright and his wife regarding the use of heating in the vacuum for hardening in his commercial work at Corning prior to Lyon's claimed invention is vague, uncertain, unsupported by any docu-

mentary evidence (although there is documentary evidence of post-baking), and unpersuasive. This proof of anticipation does not measure up to the quality of proof required to defeat a patent. *The Barbed Wire Patent*, 143 U. S. 275. On all the evidence regarding Cartwright's experiments, and his work with heating in the vacuum for hardening evaporated coatings, I conclude that Cartwright did not appreciate the benefits of heating in the vacuum, and that any such use by him was sporadic and inconclusive as to any definite advantages obtainable. He did not properly evaluate the results obtainable by heating in the vacuum to harden evaporated coatings. Certainly he did not bring it to light in the art, nor urge its adoption. Quite the contrary, the suppression of whatever Cartwright had discovered regarding the use of heating in the vacuum was due to his own efforts to withhold it from public knowledge and to his own failure to disclose it in his work at Naval Research Laboratory when he was under contract for compensation to give the United States Navy the benefit of whatever knowledge he had that could be used in applying evaporated coatings to optical elements for the Navy. I am not persuaded by the evidence that Cartwright concealed or withheld the idea and use of heating in the vacuum for hardening with

knowledge that that was the best method for obtaining hard and rugged coatings. I think rather that whatever experiments he had conducted along that line and whatever occasional use he had made of it in his commercial work had convinced him that it was inferior in results to his own patented post-baking method, and that the results obtained were not worth the effort, and did not warrant bringing it to light in the art. Even today when virtually the whole industry has abandoned post-baking, Cartwright is still not convinced that heating in the vacuum is superior to post-baking. His testimony at the trial leaves no doubt about the fact that he is still un-

certain whether one "could not get as hard a film if you left out the actual heating in the vacuum." And he admitted in his testimony at the trial that that was the way he felt about it in 1940 and 1941. Since Cartwright's use did not in fact contribute to the art, he should not be deemed a "first inventor" of the process. *Gillman* v. *Stern*, 114 F. 2d 28, 31.

Cartwright was not alone in attempting to improve the quality of ruggedness of evaporated coatings. Hewlett, a distinguished scientist employed in research at General Electric Company, began intensive work directed to the improvement of non-reflecting films on glass in January, 1938. One of the problems with which he was confronted early in his work was that of making the coatings more durable. Some time in 1940 he conducted experiments using heat in the vacuum while the coatings were being evaporated onto glass. His immediate interest at that time was in connection with the development of a non-reflecting glass cover for photographic light meters. In all of his experiments in which he used heat in the vacuum during evaporation, he used it in connection with other steps designed to improve the ruggedness of the coatings, including pre-heating and post-baking in air. None of his experiments were designed to show the results of heating

in the vacuum alone. His final experiment using heat in the vacuum conducted on July 30, 1940, was designed to answer the question whether it is necessary to have the glass plate hot while it is receiving the evaporated coating. In this experiment he also used pre-heating and post-baking in air. He concluded by this final experiment that heat in the vacuum was not a necessary step and thereafter he made no attempt to incorporate that step in his work of making non-reflecting films. As a result of his experiments Hewlett concluded that pre-heating, the securing of a high degree of vacuum, and post-baking were the important steps to secure rugged films, and that hav-

ing performed those steps he regarded heating in the vacuum as an unnecessary step, and he therefore abandoned any further efforts in the use of heating in the vacuum. It is interesting to note that Dr. Hewlett's diary contained an entry dated July 28, 1940, two days before Dr. Hewlett's final experiment which led to the abandonment of the step of heating in the vacuum, which recite that Dr. Coolidge (one of Hewlett's associates at General Electric) had written to Cartwright's representatives to find out the details of Cartwright's procedure for hardening and waterproofing films. The reply to the request was a short communication stating the essential points to be (1) pre-heating; (2) post-baking; (3) cooling the glass and the immediate application of a waterproofing agent. No reference was made to the use of heat in the vacuum. This was immediately prior to Cartwright's employment at the Naval Research Laboratory. Cartwright had previously used heating in the vacuum along with his post-baking and had so informed Hewlett in November, 1939. Cartwright's reply referred to in Hewlett's diary lends support to the conclusion that Cartwright did not properly evaluate the advantages of heating in the vacuum and that by July of 1940, he also had abandoned its use. This would explain Cartwright's

failure to disclose the idea of heating in the vacuum during his employment at Naval Research Laboratory in August of 1940. Unlike the inventor in *Corona Cord Tire Co.* v. *Dovan Chemical Corp.*, 276 U. S. 358, relied on by defendant, Hewlett did not reduce the use of heating in the vacuum to practice so as to demonstrate the practicability of the process. His experiments led him to the exact opposite conclusion, namely, that it was not practicable and he therefore abandoned it.

Joseph Beggs was employed at Eastman Kodak Company. From the Fall of 1939 to the Fall of 1940 he was employed in the Laboratory at Kodak's Hawkeye Divi-

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sion, where work on non-reflecting films on lenses was being carried on. Up to that time, Kodak's work on hardening magnesium fluoride coatings had been done mainly by post-baking. The coatings produced were still not hard enough to withstand ordinary cleaning methods. The use of coatings was therefore restricted mainly to inside surfaces. Beggs conducted one experiment using heat in the vacuum for hardening. He utilized the tungsten filament of an incandescent lamp bulb to supply the heat. He said this method produced a harder coating than the post-baking method. If any appreciable advantage was uncovered from Begg's experiment, it had no discernible impact on Kodak's methods of hardening. Apparently the result of Begg's experiment went unnoticed by his superiors responsible for Kodak's program for coating lenses. There was no activity in the Kodak laboratory involving the use of heat in the vacuum from the time of Begg's experiment in April, 1940 to the time the Lyon's process was adopted in production at the urging of the United States Navy. Its use by Kodak was urged by the Navy in 1943, but it was not actually adopted until 1944. On February 24, 1941, a report was made by Dr. McLeod, in charge of Kodak's program of coating lenses, on the subject "Proposed Experiments In

Coating With Fluoride." This was a resume of the progress of experimental work on coating. It is noteworthy that it made no mention of the idea of heating in vacuum. Another report, dated September 30, 1941, was made by Dr. McRae of the Kodak laboratory on the subject "Report on Progress of Development and Experimental Work in Lens Coating." The methods of hardening discussed in the report were the use of preheating by an oxy-hydrogen flame, post-baking and glow discharge. At this time Kodak was still searching for means to improve the ruggedness of evaporated coatings. Post-baking and the use of oxy-hydrogen flame had been

abandoned. The method of glow discharge was then regarded as the most promising. No reference was made in that report to the Begg's experiment using heat in the vacuum. For all practical purposes, Begg's idea of using heat in the vacuum had been abandoned. Early in 1943, Lyon's successful use of heat in the vacuum at the Naval Gun Factory came to the attention of Kodak officials. Then for the first time the Begg's experiment was reanimated. Beggs left Kodak's employment in August, 1942, more than two years after his experiment in April, 1940. On April 17, 1943, Kodak filed a patent application in the name of Beggs. After the issuance of the Lyon's patent on April 16, 1946, Kodak's Patent Department copied the claims of the Lyon's patent in the pending Begg's application, thus provoking an interference in the Patent Office.

This interference was subsequently settled by a written agreement dated October 23, 1947, between Kodak and Lyon which provided for the assignment by Kodak to Lyon of the Beggs application, subject to the reservation that Kodak should have the irrevocable royalty-free right to operate under the Beggs application and any patent which might issue thereon, and subject to a non-exclusive royalty-free license to the United States Government

under the Beggs application. The agreement also provided for the grant to Kodak of a paid-up non-exclusive license to operate under the Lyon patent. The agreement further provided that Kodak was to supply digests of proposed evidence regarding Begg's claimed invention to the plaintiff's attorney. In accordance with this agreement, Kodak did supply digests of the proposed evidence regarding Begg's claimed invention. In the interference it was claimed by Kodak that Beggs had completed the invention early in 1940. Lyon was advised by his attorney that in the light of all the available evidence he had priority as to the invention involved in the interference.

(924a)

The interference was dismissed accordingly. On the evidence at the trial, Lyon's claim to priority over Beggs was justified. There is no support in the evidence for the defendant's charges of fraud on the Patent Office and the public, suppression of evidence as to priority of invention, or secrecy, in connection with the agreement between Lyon and Kodak for the settlement of the issues involved in the interference proceeding.

Neither Hewlett nor Beggs contributed any new information to the art. Their work therefore may not be held to anticipate plaintiff's invention. *Metallizing Engineering Co.* v. *Kenyon* (*supra*), page 519.

The defendant contends that the patent is invalid by reason of public use by the Navy and by the plaintiff more than a year prior to the filing of the application for a patent. Lyon made his claimed invention in June, 1941, while in the employment of the United States Navy as a civilian employee at the Naval Gun Factory. He continued in his employment at the Naval Gun Factory conducting further experiments and tests in perfecting the invention and in preparation for production. His application for a patent was filed November 17, 1942. This defense calls for an examination of the nature of plaintiff's use of the invention between June,

1941, the claimed date of invention, and November 17, 1941, one year before the filing of plaintiff's patent application. Lyon was not ready to say in June, 1941, that the coatings produced were such as would suit the needs of the Navy. Tests were required to demonstrate that the coatings would be satisfactory to the Navy, including abrasion tests, soaking the films in water, subjecting the coated lenses to salt sprays and subjecting coated lenses to actual use. Machines had to be designed for use in production. The development was still in an experimental and testing status in the fall of 1941. All of this development work looked forward to production in 1942.

(925a)

In September, 1941, test coatings were applied to a small number of old World War I binoculars, which were used for such application by arrangement with the Navy officer in charge of the optical shop. These coated instruments were introduced into the assembly line without informing the personnel that the elements were coated. They were handled in the normal routine manner. This test demonstrated successfully the uniformity of the coatings from an optical viewpoint, and gave assurance that the coated elements would stand the normal handling of routine assembly. It was then decided to make a test application of coatings to larger and more complicated instruments. Coatings were accordingly applied to the elements of one of the telescopes in production in the Naval Gun Factory. This test proved successful both as to light transmission and durability of the coatings. By that time, October, 1941, it was decided by officials of the Navy that experimental work had developed as to such a stage as would warrant the placing of the process in production. Funds had to be procured for the purchase of necessary equipment. On October 30, 1941, funds were authorized. By December 30, 1941, a list of items of necessary equipment, which was thereafter to be purchased for produc-

tion units, had been prepared. In January, 1942, it was decided to apply the process to a set of optical elements of a submarine periscope. This was done and the test proved successful. In the Summer of 1942, the first production of submarine periscopes with optical elements coated by the Lyon process was had in co-operation with the Kollmorgen Optical Co., the manufacturers of submarine periscopes. All of this work in development of the invention up to the time of first production and for a long period after that, was surrounded by the strictest secrecy under Navy orders and regulations. The patent application was kept in strict secrecy. The plaintiff was ordered by the Commissioner of Patents not to publish

or disclose the invention. The plaintiff had no private coating laboratory; he never sold any optical instruments or lenses coated in accordance with the invention. He took no action at all to realize any profit from the invention until after the issuance of the patent in 1946.

It is clear from the evidence that on November 17, 1941 there had been no production at all. The status of the invention at that date was that development had progressed to such a point that funds had been authorized for the purchase of necessary equipment for production units. It was not until December 30, 1941, almost a month and a half later, that a list had been prepared of items of necessary equipment to be purchased for production units, and not until the Summer of 1942, that the first production using the Lyon process took place in coating the elements of submarine periscopes in co-operation with Kollmorgen Company. Defendant does not make it clear what particular use is claimed to be a public use so as to defeat the patent, but rests its argument on a statement in the brief not substantiated by the proof, that the process was a success from the start and was carried on continuously from June, 1941, throughout the War. From this it argues that the use of a process by a patentee in making and using

the process for its intended purpose for more than a year prior to his filing date requires application of the principle of forfeiture to invalidate the patent, even where the use of the process is secret and cannot be ascertained from the product. For its argument it relies on *Metallizing Engineering Co. v. Kenyon*, 153 F. 2d 516, and cases approving that decision. That case holds that it is the nature of the inventor's use more than one year before filing his application which controls, and if he is using the invention commercially, for profit, his patent is invalid. There is no quarrel with the doctrine. The trouble with the argument is that the facts as to the plaintiff's use and the Navy's use of the invention prior to November

(927a)

17, 1941, do not fit the doctrine. There was no use at all either by the plaintiff or the Navy prior to November 17, 1941, except experimental use to demonstrate uniformity of the coatings from an optical viewpoint and durability of the coatings.

The plaintiff has a valid patent. The defendant has infringed the patent by its use of the process covered by the patent in its commercial manufacture of optics not made for use of the United States Government.

By amendment allowed at the trial, the plaintiff stated a second cause of action alleging that the defendant acquired its information and knowledge regarding the process covered by the patent under confidential disclosures made to the defendant while the invention was maintained in a secret status by the Navy Department, and that this confidential information was given to the defendant for the sole purpose of allowing the defendant to practice the invention in making optical elements for the Navy, and that the defendant, without obtaining plaintiff's permission, wrongfully made use of such confidential disclosures and proceeded to use such confidential information for its own non-governmental work and thereby

profited from such wrongful use and was unjustly enriched thereby at plaintiff's expense. In the original complaint the plaintiff invoked the jurisdiction of this court upon the ground that the suit was one under the Patent Laws, infringement of U. S. Patent No. 2,398,382, being charged in the complaint. Upon amending the complaint to state a second cause of action, no other ground of jurisdiction was stated. Regardless of that, I think that the second cause of action may fairly be construed to assert a claim of unfair competition related to the cause of action for patent infringement, and that this court has jurisdiction thereof under 28 U. S. C. A. 1338 (b).

(928a)

Defendant's use of the process in its non-governmental work commenced at about the time that the plaintiff wrote the defendant calling its attention to the fact that he had received a patent. From the time of the issuance of the patent the information regarding the process was public knowledge. Therefore the use by the defendant of the process after the issuance of the patent was not wrongful, apart from the risk of infringement. *Schreyer v. Casco Products Corp.*, 190 F. 2d 921, 924. It is true that the defendant became skilled in the operation of plaintiff's process prior to the grant of the patent, and that this circumstance gave the defendant the advantage of being able to commence promptly to use the process on its non-governmental work. This advantage, however, so acquired was an unavoidable incident to the lawful use of the process by the defendant in performing its government contracts for the manufacture of the optics for the Navy. Since there was no unlawful use of the process prior to the issuance of the patent, the defendant may not be held to have been unjustly enriched by making use of confidential disclosures regarding the process.

The plaintiff should have judgment providing for; an injunction against further infringement by the defend-

ant; an accounting for profits and damages resulting from the infringement; ordinary taxable costs. Separate findings and conclusions are filed herewith.

HAROLD P. BURKE
U. S. District Judge

December 31, 1953.

(929a)

Findings of Fact

UNITED STATES DISTRICT COURT,

WESTERN DISTRICT OF NEW YORK.

[SAME TITLE.]

1. The suit herein for infringement arises under the Patent Laws of the United States. The cause of action for unfair competition is related to the claim for infringement.

2. Plaintiff is the owner of the entire right, title and interest in United States patent No. 2,398,382 dated April 16, 1946.

3. A search for a practical means to reduce light reflection from optical surfaces has been going on for at least 50 years. It was known as early as 1936 that coatings of metallic fluorides, when deposited on the surfaces of the optical elements in vacuum would reduce light reflection. In the years 1936 through 1942 skilled scientists were working intensively to improve the hardness and durability of such films. It was generally recognized during this period that the soft or fragile nature of such films had to be overcome before they could be brought into practical and widespread use. Such efforts were exerted by Eastman Kodak Company, General Electric Company, Research Corporation of New York, using the work of Dr. C. Hawley Cartwright, National Research Corporation and the Navy Department of the United States

Government. Various methods to solve the problem were employed in these efforts, including: (a) post-baking and pre-heating, (b) intense cleaning of the optical surfaces by the use of an oxy-hydrogen flame, (c) cleaning of the optical surfaces and the interior of the vacuum chamber or bell jar by a method known as glow discharge, and the use of special electrodes in connection with the glow discharge method.

(930a)

4. These efforts were unsuccessful from a practical standpoint, although some of them were used to a limited extent. They were all supplanted and made obsolete by the method of the patent in suit, which discloses a method of securing hard films of this type by heating the optical surfaces to an elevated temperature while in the vacuum chamber and evaporating the inorganic salt coatings onto the surfaces while they are maintained at an elevated temperature in the vacuum. The method employing post-baking and pre-heating had been given wide publicity. This method was developed and advocated by Cartwright and Dr. Arthur F. Turner, employed by the defendant. It involved heating the optical elements in the outside air, prior to evaporation of the inorganic salt coating in the vacuum, and baking the optical elements thus coated in air after evaporation. This was generally known as the Cartwright post-baking method. The oxy-hydrogen flame treatment was the subject of experiments by Eastman Kodak and it involved playing a very hot flame upon the surfaces of optical elements to thoroughly clean them, before placing them in the vacuum for evaporation. The glow discharge method involved the cleaning of the lenses and the interior of the bell jar by ionic bombardment. This practice was widely known in the art and was used by Eastman Kodak and others. The defendant also used the glow discharge method in an attempt to secure harder coatings.

5. During this same period there was some commercial production of optical lenses coated with transmission films of inorganic salts. Both Eastman Kodak and defendant produced such coatings. The coatings were applied to optical elements when the latter were in a cold condition, and in some instances the coated lenses were thereafter treated with the post-baking process. Coatings thus produced were relatively soft. The optics so coated

required careful handling, and the coatings were applied only on the inside protected surfaces of the optical instruments. During the same period the Cartwright post-baking method was widely promoted by Research Corporation of New York and the National Research Corporation of Boston.

6. These methods, as used commercially to a limited extent, were later supplanted by the entire industry, by the process of the patent in suit, due to the success of the process, as demonstrated when it was adopted by the United States Navy. The method of coating on cold surfaces as produced by defendant, was so limited in use, and was so unsatisfactory from a standpoint of durability, that defendant in 1941 recommended to the Navy Department that the evaporation process be abandoned. At that time the defendant also recommended an entirely different process known as "leaching," a chemical process, which was also later abandoned when the plaintiff's process was successfully demonstrated. The glow discharge method was used to a limited extent, notably by Eastman Kodak Company, but it was not dependable. The post-baking process was likewise not dependable and was found to be unsatisfactory by the Navy when Cartwright employed it under contract with the Navy in an attempt to coat the lenses of submarine periscopes in August, 1940. Then lenses so coated were a failure from a standpoint of hardness and durability of the coatings.

7. The plaintiff was employed by the United States Navy at the Naval Gun Factory in Washington as a civilian employee. He commenced work in January, 1941, and he was assigned to develop a Navy program in setting up the production of coated optical elements for Navy use. In the early months of 1941 he studied the existing knowledge of the subject and visited various facilities which were working with the Navy Department

in an effort to obtain coatings of satisfactory durability. He visited the facilities of the defendant and of the Eastman Kodak Company, and the facilities of National Research Corporation. He found that the coatings then being applied were not sufficiently hard and durable for the Navy's purposes. He was thus faced at the outset with the difficulty of lack of hardness of the coatings, which had baffled the most skilled in the art through the preceding years when intensive efforts were being made to solve the problem. The persons most skilled in the art had not discovered the invention of the patent in suit and had not appreciated that unusual results could be obtained thereby in securing harder films by practicing the method as defined in the patent in suit.

8. During the early part of June, 1941, in the course of plaintiff's efforts to get into production for the Navy Department, using the then known techniques, for hardening, he made the discovery that is the subject of the patent in suit, i.e., that coatings of much greater hardness and durability could be consistently obtained by practicing a method in which the optical elements were heated to an elevated temperature in the vacuum, and in which the inorganic salts were evaporated onto the heated surface while they were so maintained in the vacuum. Plaintiff made his discovery independently, and did not acquire knowledge of the invention from the prior art or from any of the facilities which he had visited. He continued to

work on this discovery and around the first of July, 1941, he was reasonably certain that he had discovered a successful method and at least as early as that date he had disclosed the method to others and had actually practiced it for others.

9. In the remaining months of 1941 he proceeded with further exhaustive experiments and tests to prove the consistent durability of the films applied in accordance

with the method of his discovery. Early in 1942 plans were made for final production experiments in applying the films to submarine periscopes for use by the Navy. In the Spring of 1942, in cooperation with the Kollmorgen Optical Company of Brooklyn, manufacturers of submarine periscopes for the Navy, final experimental coatings of submarine periscope lenses was carried out. These final tests were so successful that orders were issued by the Navy Department to go into full production using the invention, in coating all submarine periscopes. Toward the middle of 1942, this production work was underway at the Naval Gun Factory and later in the year at the Kollmorgen Optical Company. This work was so successful that all submarine periscopes both new and in service were successfully coated with the plaintiff's process.

10. Following this successful work the plaintiff's method was applied by the Navy to virtually all important optical equipment, including binoculars, gun director telescopes, spyglasses and range finders. The success of the process was so outstanding that priorities were established for coating the optical instruments of all war vessels, particularly combatant ships, in accordance with the plaintiff's method, as soon as the availability of the ships would permit, and the method was applied to the optics of both new construction ships, and ships in service. Numerous repair ships and tenders of the Navy were especially

provided with equipment to apply the process at points adjacent to combat areas. The plaintiff's invention greatly benefited the United States Navy and was regarded by the Navy as the most important development in submarine periscopes in recent years. Plaintiff received special citations from the Chiefs of the Bureau of Ships and Ordnance of the Navy Department, and later by the Secretary of the Navy. The plaintiff's invention was also

adopted by the Army for its optical equipment, and later by the industry in general.

11. Plaintiff's discovery brought forth a method which was the first to produce transmission type inorganic salt coatings of such consistent hardness and durability as to permit mass production of optical equipment with such coatings applied to both outside and inside optical surfaces, although the need for such hard and durable coatings had been apparent for many years.

12. The application for the patent in suit was filed by the Navy Department on November 17, 1942. There was no public use of the invention for more than one year preceding this date. The plaintiff's work was classified as military secret and the work which plaintiff conducted during 1941 was experimental and was carried out at the Naval Gun Factory under existing secrecy regulations. Plaintiff made no effort to exploit his invention commercially nor to profit in any way therefrom. Plaintiff had no private business involving the practice of the invention for profit, until after the war and after the issuance of his patent, when he began to license the patent.

13. Late in 1942, the defendant requested permission to send certain of its scientists, including Dr. A. F. Turner, to the Naval Gun Factory to visit the plaintiff and to learn the details of his process, for purposes of the application by the defendant of this method to optical equip-

ment being supplied to the Navy. Plaintiff disclosed full information on his discovery and method to the representatives of defendant for this purpose. Upon receiving this information, defendant recognized that the plaintiff's method had achieved superior results, as far as the hardness and durability of the films was concerned and that the films produced by plaintiff's method were superior to those previously produced by the defendant. Defendant recognized at this time that the plaintiff's method dif-

(935a)

fered from its own prior practices in respect that the optical elements were heated to an elevated temperature in the vacuum and coated with the inorganic salts while maintained at the elevated temperature in the vacuum.

14. Defendant commenced production of optics for the Navy in the Fall of 1942, using the plaintiff's method, and by 1943 such production was fully underway. During the war defendant produced millions of dollars worth of binoculars for the Navy Department, using plaintiff's method.

15. Defendant also recognized the importance of plaintiff's method from a commercial standpoint in respect to the hardness and durability of the films produced by the method. Toward the end of 1945, defendant publicly advertised to prospective customers that an outstanding development had been made during the war in securing films of increased hardness. In this publicity, defendant claimed credit for the origination of the technique which gave the harder coatings, and promised prospective customers that the advantages of this technique would be made available to them by the defendant after the war. This improved technique for securing harder films, as referred to in these advertisements, was admittedly originated by plaintiff and not by the defendant as was claimed in these advertisements.

16. The plaintiff's patent issued on April 16, 1946. At about this time defendant commenced to sell lenses commercially which were coated in accordance with the plaintiff's process. This commercial exploitation of the method, by defendant, was done without obtaining permission from the plaintiff. Shortly after the issuance of the patent in suit, the plaintiff requested the defendant to take a license under the patent. There were some negotiations between the parties, which did not result in any agree-

ment because the defendant was unwilling to pay the royalty which the plaintiff requested. At the time defendant commenced this commercial work, it was aware that it was producing the method covered by the plaintiff's patent. Up until this time, plaintiff had made no effort to exploit his invention commercially, nor in any way to derive profit from it. He had devoted all of his efforts to developing the use of the invention for the navy and army during the war.

17. Other optical companies also adopted the plaintiff's method for their commercial work at about this time. A number of these companies, including the Kollmorgen Optical Company, which had been active in coating the first submarine periscopes with the method of the invention, entered into license agreements with the plaintiff on royalty terms the same as had been offered by plaintiff to the defendant. The royalty which the plaintiff requested was reasonable.

18. In the period following the issuance of the patent plaintiff's method was receiving widespread use throughout the industry. The impact on the industry of the use of plaintiff's method was substantial, other methods such as post-baking being supplanted. The records of the Research Corporation, as of that time, indicate that the licensing program which that company had set up under the Cartwright patents was paralyzed by the widespread

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adoption of the plaintiff's invention. The plaintiff's method is today accepted and used throughout the entire optical industry.

19. The defendant is an important and leading company in the optical industry. Several companies which were approached by the plaintiff refused to take a license because of the position taken by the defendant with respect to the patent. Defendant's knowledge of plaintiff's

process and the use of the same during the war for government purposes gave it a great advantage in immediately switching the process over to commercial use at the end of the war.

20. The defendant now uses the method of the patent in suit for all of its commercial work. Defendant could avoid infringement and practice in accordance with its pre-war method, which it contends was satisfactory for all commercial work, by simply omitting to turn on the switch which controls the heater for the optical elements in the vacuum chamber.

21. Eastman Kodak Company also learned of the patent in suit from the plaintiff, when its scientists visited plaintiff at the Naval Gun Factory early in 1943. Plaintiff disclosed the details of his method to these representatives of Kodak at that time. Upon receiving this information, Kodak recognized that the plaintiff's method produced much harder and more durable coatings than those which had been previously obtained by Kodak, and that plaintiff's method differed from Kodak's prior practices in the respect that the optical elements were heated to an elevated temperature in the vacuum and maintained at an elevated temperature therein while the evaporated coatings were being applied. In late 1943, or early 1944 Kodak also applied the plaintiff's method to the production of optics on an extensive scale in government work and later used it in commercial work.

22. Kodak also recognized the commercial possibilities and value of the plaintiff's method and shortly before the end of the war, in 1945, Kodak publicly advertised that an important technique had been developed during the war which provided harder and more durable coatings, and it also claimed to have originated this technique.

(938a)

23. Kodak, after acquiring knowledge from plaintiff of the success of his method, filed a patent application on the same method in the name of one Beggs, who was no longer an employee of Kodak at that time. This application was filed because of the knowledge acquired of the plaintiff's discovery and the success of his method, and purported to be based on some experimental work of Beggs, which had long before been abandoned, and which had been conducted early in 1940.

24. Whatever work Beggs had done in 1940 was nothing more than an abandoned experiment. There was no evidence of any activity at Kodak on any invention by Beggs in the three years after his experiment and up until the time the Beggs application was filed on April 17, 1943, after the Kodak's patent attorneys had learned about the success of plaintiff's work. There were no authenticated records of any kind at Kodak referring to the Beggs work during this period, although Kodak had a large and well organized patent department and elaborate machinery for recording any important developments or experimental work. On the other hand, there were numerous reports in Kodak's files showing activity along other lines, such as the unsuccessful efforts to solve the problem by the use of oxyhydrogen flaming, by post-baking and by glow discharge.

25. Kodak reanimated this abandoned experiment of Beggs and used it as a device to exact a license from the plaintiff by provoking an interference with plaintiff's patent after it had issued, and by alleging under oath that

Beggs had earlier conceived and diligently developed the invention. The plaintiff properly disposed of this interference after he had received an assignment of the Beggs application from Kodak under a settlement agreement between plaintiff and Kodak and when plaintiff learned of the lack of any evidence at Kodak which would prove

invention by Beggs, by leaving the claims in the Lyon patent where they had been originally granted. Any experimental work which was done by Beggs did not anticipate the invention of the patent in suit.

26. The plaintiff did not unlawfully suppress the Beggs patent application. The plaintiff's action in retaining the claims which were the basis of the interference in the patent in suit was lawful and proper.

27. Dr. C. Hawley Cartwright commenced work on vacuum deposition of films as early as 1928. He carried on experiments at Massachusetts Institute of Technology during 1938 and 1939, seeking a way to harden the transmission type films of inorganic salts. In November, 1939, Cartwright was an instructor in the field of physics at Massachusetts Institute of Technology. As early as November 8, 1939, he had devised a crude apparatus consisting of a metal plate with grooves to receive glass lantern slides to be coated. The plate was heated to various temperatures, glass slides were inserted in the grooves in contact with the hot metal plate, which was then suspended in a vacuum chamber. By this method the heat of the glass slides was preserved in the vacuum while evaporated coatings of inorganic salts were applied to the slides.

28. While Cartwright was at M.I.T. he carried on as a side line a small scale commercial business of coating optical elements for persons and corporations who had become familiar with his work. He devised a crude copper

oven open at both ends, containing heating coils, designed to heat lenses electrically while under vacuum. This oven would accommodate one or two lenses.

29. This commercial work was carried on in an M.I.T. laboratory when the students were not using the laboratory. He hired a student named Clark to assist him in

this work. Clark hardened the coatings by post-baking and on occasions by heating in the vacuum, using the copper oven. This was during the scholastic year ending in May, 1940.

30. Clark was then hired by National Research Corporation of Boston in charge of the development of lens coatings. He was hired because of his experience in high vacuum work and his knowledge of coating lenses. When he was about to leave M.I.T. to go to National Research Corporation, Cartwright told Clark that he did not want his work of hardening by heating in the vacuum to be known publicly at that time, and that he wanted to work on it a little more, and he requested Clark not to divulge this method of coating. Clark complied with Cartwright's request and although employed at National Research Corporation until October, 1942, he never used nor disclosed any method of hardening except post-baking. This suppression of the idea and the use of heating in the vacuum was directly attributable to Cartwright's request to Clark not to divulge the idea because Cartwright did not want it to be known publicly.

31. Whatever experimental work and commercial work Cartwright may have performed at M.I.T. involving heating in the vacuum in filming with inorganic salts and later at Corning, N. Y., was sporadic and inconclusive and not of such nature as to invalidate the patent in suit. The evidence with respect to his work both at M.I.T. and Corning, both experimental and in his limited commercial work

is uncertain and inconsistent. He did not realize any exceptional advantages which would accrue from using heat in the vacuum because he never did isolate the step of heating in the vacuum from other steps which he employed. He took active and extensive steps to maintain such knowledge as he had about the method in secrecy. He did some coating with these films of inorganic salts

on a limited basis in his home but the evidence shows that he used his post-baking process mainly. The work of Cartwright did not anticipate the invention of the patent in suit.

32. Whenever Cartwright or his assignee had opportunity to advise anyone who was interested as to the best method for hardening evaporated coatings, they advised post-baking. Whenever Cartwright had opportunity to demonstrate his method, he used post-baking. He enjoined his associates at M.I.T. to secrecy with respect to any benefits which might result from the method of heating in the vacuum and Clark maintained any knowledge he had on this subject in secrecy, and withheld it from his employer, National Research Corporation and from the United States Navy when he was sent to Pearl Harbor in 1942 to assist in coating the optics of periscopes of submarines which were coming in from combat. As a result, the optics of these periscopes which were coated were soft and unsuitable.

33. Cartwright was engaged under contract by the Navy in 1940 to coat the optics of a submarine periscope in association with Kollmorgen Optical Company, at the Naval Research Laboratory. He did not use heating in the vacuum doing this work but rather used post-baking. The results were a failure from the standpoint of hardness. He had no intention of using the step of heating in the vacuum in his work at the Naval Research Laboratory in 1940.

34. Throughout the history of the development of this art Cartwright advocated, practiced and patented post-baking. He was widely identified with this method. He greatly influenced those working in the art in the belief that post-baking was the method that would secure the harder coatings. Whatever knowledge he may have had from heating in the vacuum he maintained in secrecy.

(942a)

Whatever experiments he had conducted along that line and whatever practical use he had made of it in his commercial use had convinced him that it was inferior in results to his own post-baking method and that the results obtained were not worth the effort and did not warrant bringing it to light in the art. Up to the time that plaintiff's patent application was filed, and even after that time and up to the present time, Cartwright did not appreciate the benefits of heating in the vacuum. He did not properly evaluate the results obtainable of heating in the vacuum. He did not bring it to light in the art nor did he urge its adoption. On the contrary, whatever he did discover regarding the use of heating in the vacuum was withheld from public knowledge through the affirmative steps taken by Cartwright. These affirmative steps were taken by Cartwright because he had failed to appreciate the advantages obtainable by heating in the vacuum.

35. Dr. Clarence L. Hewlett performed extensive experimental work for General Electric Company in the period from 1938 to 1940 in an attempt to solve the problem of lack of hardness and durability of transmission type films of inorganic salts. He received information from Cartwright that the best way to harden the films was by pre-heating and post-baking. He experimented with a method involving heating in the vacuum in association with pre-heating and post-baking, and immediately concluded in this experimentation in the summer of 1940 that the step of heating in the vacuum was of no advantage.

He did not isolate this step from the other steps which he regarded as more important, which were pre-heating and post-baking. He abandoned any thought of using heating in the vacuum after a short series of experiments and the work of Dr. Hewlett on this subject was an abandoned experiment. He thereafter adopted post-baking as the solution of the problem. The work of Hewlett did not anticipate the invention of the patent in suit.

(943a)

36. There was no evidence of any work by Osterberg and Pride relating to the invention of the patent in suit until long after plaintiff had made his discovery and invention and had successfully reduced it to practice.

37. The plaintiff's discovery of the method described in the patent yielded unexpected results and was an invention of high order. Although prior patents and publications were offered by defendant disclosing heating in the vacuum when coating with metals, the full history of activities of the most skilled working in the art over a period of years shows that such knowledge did not teach plaintiff's discovery in connection with applying films of inorganic salts. It taught nothing to the defendant and its group of skilled technicians, including defendant's Dr. Turner, who had been identified with Dr. Cartwright and was a leader in this field in his own right.

38. The use of heat when coating with metals did not make it obvious to those skilled in the art that unexpected results might be secured using heat when coating with inorganic salts. There is no general equivalence between salts and metals.

39. The solution of the problem of lack of hardness in evaporated coatings as taught in the patent in suit was not obvious to Cartwright nor to Hewlett nor to the corporations working on the problem, including the defendant, Eastman Kodak Company, Research Corporation and National Research Corporation.

40. The prior patents and publications offered by the defendant at the trial were substantially the same in disclosure as those which were before the Patent Office when the patent in suit was granted. The Patent Office Examiner found that the films of inorganic salts, referred to in the patent in suit, were well known for the purpose, and that

the use of heat in the vacuum had been suggested in connection with coating with metals. He found that in the art of coating with inorganic salt films it was believed that the films could be hardened by pre-heating and post-baking. He found that in the art of coating with inorganic salts it had not been suggested to heat the elements to an elevated temperature in vacuum and to evaporate the films thereon while the elevated temperature was maintained in the vacuum. He found that this method was not taught by the prior patents and publications, was not obvious, and the record at the trial fully supports the findings and decision of the Examiner.

41. The plaintiff's discovery was of an inventive and patentable character and was not anticipated by any prior patents or publications, nor by any prior knowledge or public use.

42. The plaintiff did not misrepresent the state of the art to the Patent Office during the pendency of his application. He did represent to the Patent Office that outstanding results had been achieved by the method taught and claimed in his application, particularly that notable success had been achieved in work for the Navy during the war. The whole record shows that the representations made by the plaintiff were true. The Patent Office Examiner was not improperly induced to allow the claims of the patent in suit.

43. The patent defines a new and useful method or process residing in the heating of the optical elements in

vacuum to an elevated temperature and depositing the inorganic salt coatings of the metallic fluorides, such as magnesium fluorides, thereon while they are maintained at this elevated temperature in vacuum.

(945a)

44. The patent does not claim a product. The claims of the patent are not too broad and indefinite and adequately define the invention. The specification of the patent is adequate to teach those skilled in the art how to practice the invention. The record shows that the defendant had no difficulty in interpreting the patent and its claims. The evidence shows that those skilled in the art well knew the materials which were recognized as applicable, in making these particular coatings, and the claims of the patent are not unduly broad, being confined to the materials which were well-known in the art to be applicable for the purpose.

45. Defendant acquired knowledge of the plaintiff's invention under confidential circumstances, and for a limited purpose. The defendant became skilled in the operation of plaintiff's process prior to the grant of the patent. This circumstance gave the defendant the advantage of being able to commence promptly to use the process in his non-governmental work. This advantage, however, was an unavoidable incident to the lawful use of the process to the defendant in performing its government contracts for the manufacture of optics for the Navy. Defendant's use of the process in this non-governmental work commenced at about the time that the plaintiff wrote the defendant calling its attention to the fact that he had received a patent. There was no use by the defendant of the process prior to the issuance of the patent.

46. Defendant's commercial process on its non-governmental work which it now uses, infringes the patent in suit.

(946a)

Conclusions of Law

1. The Court has jurisdiction of the subject matter and of the parties involved in this suit.

2. The patent in suit was properly issued.

3. The plaintiff is the owner of the entire right, title and interest in and to the patent in suit, subject to a free license to the United States Government to use it for Government purposes.

4. The plaintiff's discovery on which the patent is based was of an inventive and patentable character and is not anticipated by the prior art.

5. The patent in suit, including claims 1 through 5, 8 and 9 thereof, is good and valid in law.

6. The plaintiff does not come into court with unclean hands as alleged by the defendant and is not barred from relief thereby.

7. The method which defendant has employed in its commercial operations after the issuance of the patent and prior to the filing of this suit and without permission of the plaintiff incorporates the invention of the patent and infringes claims 1 through 5, 8 and 9 thereof.

8. Because there was no use by the defendant of plaintiff's method, which was disclosed to the defendant in confidence prior to the issuance of the patent, until after the issuance of the patent, the plaintiff cannot recover on his claim of unfair competition and unjust enrichment.

9. The usual presumption of validity arising from the granting of the patent is strengthened by the following: (a) The defendant appropriated and employed in practice the plaintiff's invention in its commercial work rather

than using methods of the prior art; (b) Virtually the whole industry uses the plaintiff's invention rather than the methods of the prior art; (c) The plaintiff's invention was accepted and successfully used in the armament program of the Second World War after prior art methods had been tried and found to be unsuitable; (d) The record at the trial establishes that the plaintiff's discovery was overlooked by the most skilled scientists working in the art for long periods of time on the specific problem of obtaining hard and durable films, even though the solution to the problem was under their very eyes.

10. Plaintiff is entitled to an injunction restraining defendant from further infringing the patent and to an accounting for profits and damages resulting from the infringement, together with ordinary taxable costs. The claim based upon unjust enrichment should be dismissed.

(Signed) HAROLD P. BURKE,
U. S. District Judge.

December 31, 1953.

HAROLD B. WILLEY, Clerk

IN THE

Supreme Court of the United States

OCTOBER TERM, 1955

No. 379

BAUSCH & LOMB OPTICAL CO.,
Petitioner,

v.

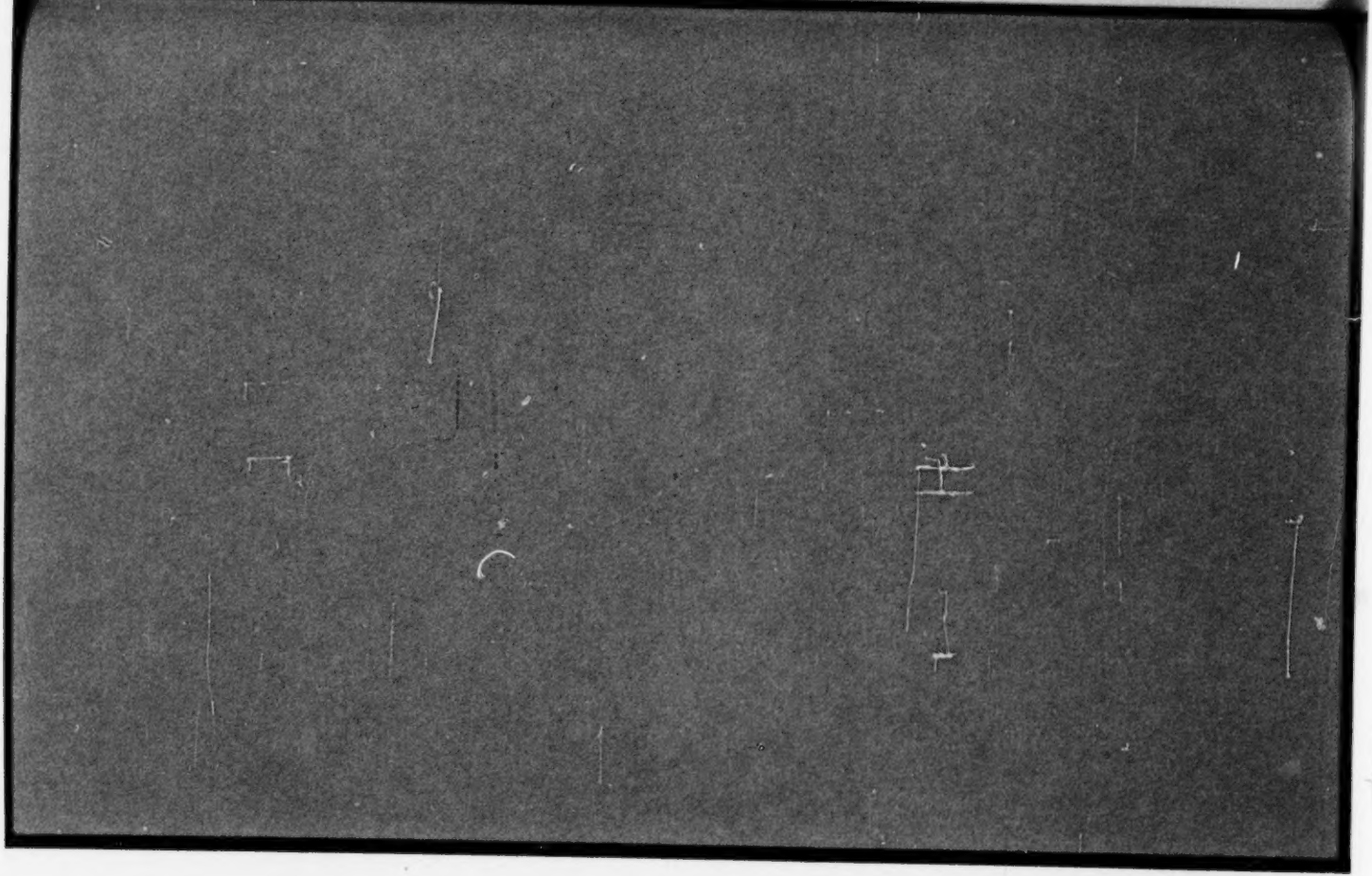
DEAN A. LYON,
Respondent.

REPLY BRIEF FOR PETITIONER

EDWARD H. CRAMPTON,
711 Wilder Bldg.,
Rochester 14, N. Y.,
Attorney for Petitioner.

JOHN N. COOPER,
233 Broadway,
New York 7, N. Y.

G. A. ELLENTAD,
Rochester 2, N. Y.
Of Counsel.



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The Questions Presented

The "Questions Presented" are questions of law. They are raised by the several instances in which the Court of Appeals either failed to apply the settled and applicable law or applied it erroneously to the facts stated in its opinion.

These questions involve, as a matter of law, whether the decisions of this Court as to the standard of invention, during the twenty-five years before the 1952 Act, are in conflict with its earlier decisions and with Sec. 103 of the act itself (Petition, p. 6) and whether, as a matter of law, an admitted prior reduction to practice and non-secret commercial use of the claimed invention (by Cartwright) which the Courts below rejected only because it had been "a small scale commercial business" (Vol. II, D. A. 916a) not suffi-

ciently exploited and termed "in effect an abandonment," is knowledge or use or public use under Secs. 101 and 102 of the Patent Act of 1952 (Petition, p. 5).

Respondent's brief ignores or brushes aside these questions of law which arise solely by virtue of the misapplication of principles of law by the Court of Appeals to the facts as found and beyond dispute. Instead Respondent attempts to confuse the issue by arguing about and from Findings of Fact of the District Court (prepared by Respondent) and devotes a considerable portion of his brief to unfounded charges that Petitioner's statement of the case is inaccurate and misleading.

Question No. 1

This question is raised by that portion of the decision of the Court of Appeals (Petition, p. 11a) stating that

> "* * * it must be owned that, had the case come up for decision within twenty, or perhaps, twenty-five years before the Act of 1952 went into effect on January 1, 1953, it is almost certain that the claims would have been held invalid, * * *"

but in which the Court nevertheless held certain of the claims valid on the ground that it

> "* * * should construe Sec. 103 as restoring the law to what it was when the Court announced the definition of invention, now expressly embodied in Sec. 103, * * *."

By "definition of invention" the Court referred to the definitions of the standard of invention contained in the decisions of this Court prior to the twenty-five years before the Act. The definition in the Act is merely that even if the invention satisfies the conditions for novelty in Secs. 101 and 102 (Petition, p. 5) no patent may be granted if "the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in

the art" involved. The Court below expressed the opinion that this definition is consonant with the definitions in the earlier decisions of this Court and in that it was undoubtedly right. But it is impossible to find, and the Court below was unable to point out, in such language of the Act, any distinction between such earlier and more recent decisions of this Court.

The Court of Appeals clearly ruled that, but for its interpretation of the effect of Sec. 103, the patent in suit is wholly invalid for lack of invention. Respondent does not challenge the fact that the construction and effect given to Sec. 103 by the Court of Appeals is in direct conflict with the decisions of all other courts that have passed upon this question. See pages 16 and 17 of the Petition and the following additional cases:

Vincent v. *Suni-Citrus Products Co.*, 215 F. 2d 305, 315 (C. A. 5; 1954);

Torok v. *Watson, Commissioner*, 122 F. Supp. 788, 790 (D. C. D. C.; 1954);

Modern Art Printing Co. v. *Skeels*, 123 F. Supp. 426, 432 (D. C. D. N. J.; 1954);

Hughes v. *Salem Co-Operative Co., Inc.*, 107 USPQ 39, 43 (D. C. W. D. Mich. S. D.; 1955);*

Cold Metal Products Co. v. *Newport Steel Corp.*, 107 USPQ 59, 61 (C. A. 6; 1955);*

Seismograph Service Corp. v. *Offshore Raydist Corp.*, 107 USPQ 101, 110 (D. C. E. D. La.; 1955).*

The decision of the Court below, therefore, is conditioned on the determination of a question of law. If the recent decisions of this Court are to be modified and liberalized as to the strictness of application of the standard of invention, then the opinion of the Court below is that the patent meets the test of obviousness of Sec. 103, but if otherwise, then

*Not yet officially reported.

the Court below is of the opinion that the patent is invalid under that section of the Act. The decision below attempts no definition of the level of invention as between the earlier and recent decisions of this Court and points out that "'invention' became perhaps the most baffling concept in the whole catalogue of judicial efforts to provide postulates for indefinitely varying conditions."

The decision below thus raises a question as to a conflict between the earlier and the more recent decisions of this Court, and this conflict can only be settled by this Court.

Question No. 1 is not too general. Its importance is self-evident, particularly in view of the conflict of decision between the Second Circuit and the other courts, and in view of the fact that the standard of invention is a constitutional standard.

Question No. 2

Respondent represents Petitioner's position as assuming findings of invalidity of his patent and claiming a right to infringe, but that, of course, is not Petitioner's position.

Petitioner was not informed of any claim to patent rights by Respondent until served with written notice of the issue of the patent (Vol. III, P. A. 79a, 81a) on April 16, 1946. Respondent demanded what Petitioner regarded as exorbitant royalties under a burdensome system of computation. Petitioner was advised by counsel that the patent was invalid and declined a license. Suit was not brought until more than three years later on May 6, 1949.

Respondent had a right during such period to adjudicate its patent against Petitioner and Petitioner had an equal right to contest such adjudication, to show that the Patent Office was not authorized by law to issue such a patent and that it was invalid for lack of novelty and invention. The Court below was of the opinion that in any adjudication prior to the effective date of the Act of January 1, 1953, the patent would have been held invalid; or, in other words,

that the patent was validated by the Act and, in effect, reissued on that date as a valid patent.

While the Act may be retroactive to excuse defects of prior procedure, as in the past practice in obtaining reissues and filing disclaimers, Petitioner submits that it should not operate retroactively to amerce in damages for activities carried on rightfully without infringement of any valid patent. The Courts have long held that where a patent is altered by reissue, a party accused of infringement, by activities carried on in reliance on defects of the patent prior to reissue, cannot be subjected to damages and acquires intervening rights to continue such activities. This principle has now been enacted into statutory law in 35 U. S. C. 252 (Petition, p. 6).

Petitioner submits that should the decision below be affirmed, it should not be subjected to the injustice of an *ex post facto* change in substantive rights, but should at least be relieved of damages and allowed intervening rights analogous to the procedure in the case of reissues as now provided by the Act.

Question No. 3

This question is not too broad and relates to Question No. 1. The Court below held that, but for its interpretation of the effect of Sec. 103, the patent in suit is invalid. Accordingly this Question No. 3 is necessarily involved along with Question No. 1.

Respondent objects to this question on the ground that Petitioner misstates the facts of record relied upon in relation to it. This issue is created by the confusion as to the subject matter of the invention which has been thrown around it ever since it was confronted with the prior patents by the Patent Office Examiner. The idea designated and claimed as the invention by the patent is a method of coating with any "suitable coating material", including both light-reflecting materials (metal sulfides) for mirrors and also

light-transmitting materials (metal fluorides) for coating lenses to reduce reflection. Such light-transmitting coatings were acknowledged as old at the outset of the specification which designated the supposed novelty of the method as residing in the simple expedient of coating on hot as distinguished from cold glass. The purpose of heating the glass is described as the cleaning of the glass surface by evaporating off the surface moisture and grease and the production of a hard coating of fine crystaline structure.

The invention described and claimed is a method, i.e. a sequence of steps for coating with any "suitable coating material" including a wide variety of metal salts and oxides (both light-reflecting and light transmitting) specified as suitable for use in the method. The patent thus discloses and Respondent testified that the method is the same regardless of the coating material used (Vol. I, D. A. 70a, 76a). The coating material operated upon by the method, therefore, is no more a step of the method than the lens itself is a part of such method, or a part of any method by which it may be ground and polished. The claims sustained on appeal were all limited to use of the method with light-transmitting or metal fluoride coating materials, as the only distinction from the prior patents disclosing precisely the same combination or sequence of method steps for accomplishing the same results in coating mirrors with metals. The patent to Macksoud 2,217,228 (Vol. II, D. A. 788a, 791a, col. 1, lines 15-41) disclosed the same result in coating glass with metals using the same steps.

For this reason, Respondent has always referred to the method as limited to coating with such inorganic or metal salts, to the confusion of the Courts below. It will be noted that the opinions of both courts refer to the method as new only in use with such coating materials (Respondent's Br., pp. 1a, 4a-6a, 35a; Petition, pp. 3a-4a, 20a.) The main opinion of the Court of Appeals and that on rehearing, indicate that the Court treated the claims as covering such coating ma-

terial, as the distinguishing point of novelty. But that cannot be, because such coating materials had been exhaustively described in the prior patents, as applied in the same way except on cold glass (Cartwright et al. Nos. 2,207,656, 2,281,474-5, Vol. II, D. A. 779a, 806a, 811a). Original claim No. 12 to the optical element coated with such material (Vol. II, D. A. 563a) was rejected on such patents and cancelled and abandoned in the Patent Office (Vol. II, D. A. 563a, 578a, 597a).

Even under its confused view of invention and of the prior art, the Court of Appeals would have held the patent invalid for lack of invention except for its interpretation of the effect of Sec. 103.

The 1931 publication by Cartwright and Strong (Vol. II, D. A. 743a) was produced in connection with the requirements of novelty under Secs. 101 and 102 (Petition, p. 5), but it was completely ignored by the Court of Appeals. However, the District Court conceded in its opinion that this publication (not before the Examiner and not referred to in the Findings) does disclose "heating in vacuum * * * in connection with the deposition of silver on glass to make a reflective coating" (Respondent's Br., p. 6a). So this publication discloses still more pertinently the same sequence of steps and teaches its use with many materials including the light-transmitting "alkali halides" and "fluorite" (calcium fluoride) which are metal salts and metal fluorides. This publication is a complete anticipation in itself.

Petitioner's statements of facts in connection with this question are thus based on documentary evidence, Finding No. 40 (Respondent's Br., p. 35a) and the facts found in the opinions of the Courts below.

Question No. 4

This question involves, as a matter of law, a determination of what activities constitute prior invention, prior knowledge and use and public use, to negative novelty under the

requirements of Secs. 101 and 102 of the Act (Petition, p. 5). The 1952 Act merely reenacted the requirements of R. S. 4886, 35 U. S. C. 31, 1946 Ed., and it is not contended by either party that these requirements were changed by the 1952 Act.

This question is based on the facts that Cartwright did actually conceive and perform the entire steps of the claimed invention, did commercially coat lenses for pay by using those steps and made unrestricted disclosure of those steps to a potential competitor prior to Lyon's date of invention, as found by the Court of Appeals (Appendix to Pet., pp. 6a-8a). Respondent attempts to controvert these facts by the quotation, out of context, of sections of the Findings of Fact and opinions which cannot avoid, and indeed include, these essential facts.

Findings 27-30 (Respondent's brief, pp. 30a-31a) concede that Dr. Cartwright, who had published a description of the patented method in 1931 (as referred to above under Question No. 3) was an instructor in Physics at M. I. T. in 1939 and "carried on as a side line a small scale commercial business of coating optical elements". In the course of this business he carried on Respondent's patented method of coating with light-transmitting inorganic salts (magnesium fluoride) on lenses while heated in the vacuum by heating devices produced in evidence (Vol. II, D. A. 730a, 818a, 819a) which he devised for the purpose. This commercial work reached such a volume that he hired a student assistant, Clark, who also practiced the patented method in such work (Finding 29). When Clark left in 1940 for employment by a competitor of Cartwright's sponsor, Cartwright requested him not to inform the competitor of the method of coating on hot glass. There is no Finding of any other effort at secrecy by Cartwright.

Findings 31-34 (Respondent's brief, pp. 31a-33a) are devoted less to facts than to erroneous conclusions that since the commercial use of the invention by Cartwright and Clark

was "sporadic" and "limited in volume", Cartwright did not "appreciate the benefits of heating in the vacuum," nor "properly evaluate the results" obtainable thereby, and that his work, therefore, was an experiment and not an invention. No finding was made as to the unrestricted and complete disclosures and high evaluations made by Cartwright to his sponsor, Research Corporation, and to Dr. Hewlett of the General Electric Co.

The District Court's opinion conceded that Cartwright knew and used the patented method in 1939, and then said "These admissions pose important questions, i.e., whether Cartwright properly estimated the value of heating in the vacuum to harden the coatings, and * * * whether he brought it to light in the art and urged its adoption." The opinion proceeded to describe the commercial use of the patented method by Cartwright and Clark and Cartwright's recommendation of it to his sponsor. But the District Court adopted and followed the conclusion of the Findings referred to above that since such commercial use was only "sporadic" and "limited," Cartwright did not "appreciate" nor "properly evaluate" the invention, and was not a "first inventor". The opinion of the District Court is singularly bare of the pertinent citation or discussion of relevant authorities and principles of law relating to reduction to practice, prior invention, prior knowledge and use and public use. It failed to apply the requirements for novelty imposed by Section 4886 or Secs. 101 and 102.

The Court of Appeals found from the record that Cartwright conceived the patented method and practiced it with such success and satisfaction that he recommended it in a written report to his sponsor (Vol. II, D. A. 734a, Deft's. Exh. D-31-A) and supplied sample coatings and recommended it without any secrecy restriction (Petition, p. 7a) to Dr. Hewlett of the General Electric Co. who communicated this disclosure in a written report to his company (Vol. II, D. A. 714a, Deft's. Exh. D-25-C). The Court further found that Cartwright carried on a commercial business of coating

lenses at M. I. T. of such proportions as to require the employment of Clark and that he continued the business later with the help of his wife as a technical assistant, while employed by the Corning Glass works. "It resulted in a substantial income, at times amounting to $3000 a year, and many, though not all of the lenses were coated while hot" (Petition, p. 8a). The undisputed testimony (with no finding to the contrary) is that there was no complaint with respect to any of the coatings of any of the lenses coated by Cartwright (D. A. Vol. I, 124a, 156a, 280a). The Court found that this work was a public use, if "neither experimental, secret, nor abandoned"; concluded that it was neither experimental nor secret; and agreed with the District Court only to the extent that Cartwright failed to appreciate and properly evaluate the idea and therefore "abandoned his discovery as soon as it emerged from the stage of experiment."

When Cartwright's discovery "emerged from the stage of experiment," it was put into commercial use, and thus was no longer an experiment but a completed reduction to practice and invention in actual public use. Such prior invention, knowledge and use, even if later abandoned, were just as much a bar to later inventors, under Secs. 101 and 102 of the Act, as if there had been no abandonment.

The decision of the Court of Appeals is directly contrary to the decisions of this Court and the innumerable conforming decisions of the lower Courts as pointed out in the Petition.

The Statement of the Case

Respondent accuses Petitioner of failing to state and of misstating material facts. The facts referred to by Respondent are not regarded as relevant or material and are presented largely by excerpts taken out of context and tend to be misleading. It is not believed that an extensive discussion of them is in order at this point, or would be helpful

in consideration of the applicable principles of law, the documentary evidence, or the opinions below on which Petitioner relies. Respondent states, for example, that "The trial Court's findings were unanimously affirmed by the Court of Appeals." The fact is that the case was tried in 1952 and briefed, argued and decided in the District Court, without reference to the effect of the Act which became effective January 1, 1953. The Court of Appeals reversed the trial Court's holding of validity as to claims 1, 2, 4 and 5 and unless the Court of Appeals is correct in holding that the 1952 Act has changed the law, it was of the opinion that the trial Court should be reversed altogether.

Again, Respondent objects to Petitioner's statement that there was no long felt want in the art for the patented method. The facts are that while Cartwright and Strong, in their 1931 publication, had disclosed the coating of hot glass in a vacuum with both metals and metal salts, it remained for Cartwright and Turner, in 1939, to publish the basic characteristics of thickness and refractive index of the coating and optimum coating materials for light-reflecting coatings before the art was informed of the practical utility and availability of such coatings, thereby creating the first desire for their use. This was done in their three patents of record and the current technical literature (Vol. II, D. A. 835a). Dr. Sanderson, of Respondent's own Navy Department section, said as to this (Vol. II, D. A. 609a):

> "While the optical phenomena upon which the action of films depends and the method by which they are prepared have long been familiar, it remained for Cartwright and Turner to achieve practicability for the process by demonstrating that optical instruments so treated would stand ordinary usage and show greatly improved performance over similar untreated instruments. Much of the information included in this report was obtained during the period of a month that Dr. Cartwright spent in residence at this laboratory."

Light-transmitting (reflection-reducing) films were a new art in 1939, and that fact induced adoption by the Navy at that time. Quickly after his employment in January, 1941, Respondent gleaned the information from the art and, as he explained to a colloquium of the optical industry, he "stumbled upon that *old idea* of heating the elements in a vacuum" (Vol. II, D. A. 627a).

Respondent charges Petitioner with misleading use of the term "preheating" as at page 8 of the Petition which refers to "* * * heating the lens, before being coated in the vacuum (preheating) * * *." This was plainly a use of the term in the same sense as in Respondent's patent specification which refers to the known cleaning step of baking the lens "in an ordinary oven" outside the vacuum chamber. The term was so understood and employed by all, throughout the record, and by both Courts, without any confusion whatever.

The statement in the Petition at page 8 that it was a known practice to heat the lens while coating it in the vacuum with a light-transmitting material, is based upon Cartwright's 1931 publication and upon the opinions of both Courts that he reduced such method to practice, described it in current documents of record in the case and used it in a commercial business. It will be noted that the statements to the contrary in reference to the prior patents and publications, by the Courts below and by Respondent, are limited to use of the method with light-transmitting or inorganic salts as pointed out above (p. 7). Petitioner relies upon the 1931 publication to speak for itself (Vol. II, D. A. 746a).

The statements of the Petition as to the Patent Office record are based upon the file wrapper in evidence (Vol. II, D. A. 552a-602a), which likewise speaks for itself.

The statement in Petitioner's Answer to the complaint as to the laxity of the Navy Department, in not claiming title to the invention for the Government, was prepared by counsel on Respondent's testimony as to the circumstances of his employment and the subsequent official investigation by the

Department of Justice and the President's Order correcting the practice.

Petitioner's description of the function of the patented method as cleaning the glass, was based upon the corresponding statements in the Respondent's patent specification. Respondent had stated in addressing a colloquium of the industry that he was unable

> "* * * to separate tenacity and hardness when talking about a film which is only four one millions of an inch thick * * *" (Vol. II, D. A. 630a).

If such hardening of the coating was an additional function of the method, Respondent offered no test data to prove the fact and submitted no sample of his coated product even for inspection by the Court. In any case the same function had been disclosed in coating with metals (Macksoud Patent 2,217,228, Vol. II, D. A. 791a, col. 1, lines 38-41).

As regards reference of the District Court to Cartwright's 1931 publication, the Court said: "The reference to the use of heating in vacuum is in connection with the deposition of silver on glass to make a reflective coating," and this was said with reference to the exemplary description of application of the method to one of the many materials disclosed therein, notwithstanding the fact that the publication described the method as useful for many materials including metal fluorides.

The Court of Appeals, when referring to the novelty of Lyon's heating step, was discussing only coating with light-transmitting material, as shown by the context, and the very statement quoted by Respondent shows that the Court overlooked Cartwright's 1931 publication which discloses the use of the method with such materials.

The opinion of the Court of Appeals was very clear and positive that Cartwright did use the patented method in a commercial business and that such use was neither experimental nor secret, but abandoned "as soon as it emerged

from the stage of experiment", as referred to above in connection with Question No. 4. The disregard by the Court of Appeals of the documentary proofs of lack of novelty under Secs. 101 and 102 of the Act, have been discussed above in connection with Questions 3 and 4.

The District Court found that Petitioner was required to use the patented method in supplying the optical requirements of the Government; Petitioner did not use the process in non-governmental work until after the issue of Respondent's patent at which time Petitioner was first informed of Respondent's claim to patent rights (Finding of Fact No. 45 and Conclusion of Law No. 8, Respondent's Br. pp. 36a, 37a). Respondent's claim of unfair competition was dismissed by the District Court as wholly unfounded. Respondent took no appeal and that issue is surely foreclosed against prejudicial reargument in this procedure.

The Petition should be granted, for consideration and suitable disposition of the case by this Court.

Respectfully submitted,

EDWARD H. CUMPSTON,
711 Wilder Building,
Rochester 14, New York
Attorney for Petitioner.

JOHN N. COOPER,
233 Broadway,
New York 7, N. Y.

G. A. ELLESTAD,
Rochester 2, N. Y.
Of Counsel.

DEC 2 9 1955

HAROLD B. WILLEY, Clerk

IN THE

Supreme Court of the United States

OCTOBER TERM, 1955

No. 379

BAUSCH & LOMB OPTICAL CO.,

Petitioner,

v.

DEAN A. LYON,

Respondent.

PETITION FOR REHEARING OF ORDER DENYING PETITION FOR WRIT OF CERTIORARI

EDWARD H. CUMPSTON,
711 Wilder Bldg.,
Rochester 14, N. Y.,
Attorney for Petitioner.

JOHN N. COOPER,
233 Broadway,
New York 7, N. Y.

G. A. ELLESTAD,
635 St. Paul Street,
Rochester 2, N. Y.
Of Counsel.

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APPENDIX

Excerpts from Proceedings before the United States Senate Sub-Committee on Patents, Trademarks and Copyrights of the Committee on the Judiciary..... 1a

IN THE

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OCTOBER TERM, 1955

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BAUSCH & LOMB OPTICAL CO.,

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PETITION FOR REHEARING OF ORDER DENYING PETITION FOR WRIT OF CERTIORARI

Petitioner prays that this Court grant rehearing of its Order of December 5, 1955, denying the Petition for Writ of Certiorari and that a Writ of Certiorari issue to review the judgment of the Court of Appeals for the Second Circuit in the above entitled case limited to Questions 1 and 2 as set forth and as prayed for in the Petition filed September 9, 1955, herein.

Questions 1 and 2 present the essential issues of whether or not the Patent Act of 1952 provides a different and lower standard of invention than that existing and applied just before its effective date and, if so, could there be any valid retroactive effect of that Act, particularly in view of the provisions of Section 5 of the Enabling Act (see pages 3, 6-7, 14-19 of the Petition for Writ of Certiorari, etc., and pages 10a-15a of the Appendix thereto).

Reasons for Granting Rehearing and Issuing the Writ

1. The Widespread Interest in the Decision Below.

The decision below has aroused widespread interest, inquiry and comment. The decision below aroused the interest of the Sub-Committee on Patents, Trademarks and Copyrights of the Senate Committee on the Judiciary, and pertinent portions of the proceedings thereof dealing with the decision below and the Patent Act of 1952 are printed in the accompanying Appendix to this petition.

Judge Learned Hand, in his testimony before this Sub-Committee, made reference to the case of *Hotchkiss* v. *Greenwood* (1850; 52 U. S. (11 How.) 248), and stated (p. 3a of the Appendix hereto):

> "I suppose that was what lay behind the construction of the old rule that it had to be more than use. It was entirely judge-made. There was not a syllable in the statute at that time. Some of the syllables have come into the statute recently but we don't know yet quite what they mean."

Later on, in response to a question by the Sub-Committee counsel, directed to his decision in the present case, Judge Hand stated (pp. 3a and 4a of the Appendix hereto):

> "Now when the Congress passed the Act, whether we were right in construing it as meaning that the old rules were to apply, remains to be seen. I hope the case will go up."

Others before the Senate Committee expressed conflicting views about the effect of Section 103 (compare the statement of Mr. Robertson with that of Mr. Bruninga, pp. 5a, 6a of the Appendix hereto).

Counsel for Petitioner has been requested to supply records for the preparation of articles and comments published and to be published in the following Law Reviews:

Harvard Law Review
Columbia Law Review
Northwestern University Law Review
Wayne Law Review
State University of Iowa Law Review.

The only article published to date is that contained in the Harvard Law Review, Volume 69, No. 2, December 15, 1955, where the writer commented in reference to the decision below and Section 103 of the Act as follows:

> "The legislative history seems to indicate that the authors of the Act looked to Supreme Court opinions when they drafted a section which 'provides a condition which exists in the law and has existed for more than 100 years, but only by reason of decisions of the courts.' H. R. Rep. No. 1923, 82nd Cong., Second Sess. 7 (1952). It is difficult to see why Congress would adopt the standard utilized by the Supreme Court and at the same time would tacitly repudiate the court's recent application of that standard."

This decision has already been hailed by some as lowering the established standard of invention defined by the decisions of this Court during the last twenty-five years.

The Bulletin of the American Patent Law Association for July-August, 1955, featured an article (page 268) about this case and referred to the decision as adding "a bright new star to the firmament of decision law".

2. The Decision Below Conflicts with Decisions in the Ninth Circuit.

Since the filing of the Petition for Writ of Certiorari herein on September 9, 1955, a decision of the Court of Appeals of another Circuit has been reported which is in conflict with the decision sought to be reviewed and is in especially direct conflict because involving the same issue of law arising from similar facts. This is the decision

in *Pierce* v. *Muehleisen*, 226 F. 2d 200 (C. A. 9, Oct. 3, 1955), where the patent claimed a method of treating a mineral material and the alleged novelty resided in a heating step, similar in that respect to the present invention. The Court found that it was old to use the same method for treating analogous materials and the Court, after quoting Section 103, held the patent invalid under that section for lack of invention. The Court said (p. 204):

> "We do no more than recite a well established rule of law when we say the application of an old process to analogous material of foreseeably similar character is not a sufficient contribution to the science to justify the award of a patent monopoly. It is only the achievement of the inventive faculty, as opposed to the product of the exercise of ordinary professional skill, that entitles the researcher to a patent. 35 U. S. C. A. § 103, Mandel Bros. v. Wallace, 335 U. S. 291, 69 S. Ct. 73, 93 L. Ed. 12; General Electric Co. v. Wabash Appliance Corp., 304 U. S. 364, 58 S. Ct. 899, 82 L. Ed. 1402; see also, Standard Brands v. National Grain Yeast Corp., 308 U. S. 34, 60 S. Ct. 27, 84 L. Ed. 17; Paramount Publix Corp. v. American Tri-Ergon Corp., 294 U. S. 464, 55 S. Ct. 449, 79 L. Ed. 997; and, Pennsylvania Railroad Co. v. Locomotive Engineer Safety Truck Co., 110 U. S. 490, 4 S. Ct. 220, 28 L. Ed. 222."

In the above decision the Court thus cited both recent and earlier decisions of this Court as unchanged by Section 103.*

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*This same Court in *Thys Co. et al.* v. *Oeste*, 219 F. 2d 131, January 25, 1955, had earlier affirmed the decision of the District Court in that case, reported at 111 F. Supp. 665, 673, 674, February 25, 1953, stating with reference to Section 103:

> "It is difficult to perceive how the plaintiffs can gather comfort from either this section or the Reviser's Note thereon. It would seem that Congress here has clearly indicated that it did not intend to lower the standard of invention which obtained before the new codification—'since at least as early as 1850.' The purpose of the new revision, as the Reviser's Note points out, is not to *revolutionize* but to 'stabilize' existing law."

The Court below found (as did also the District Court) that the same sequence of steps of coating in vacuum on hot glass was an old practice in applying metal coatings to a glass surface, and that in the claimed method of the patent in suit the same sequence of steps is employed except that the glass surface (of the optical element) is coated with the old and well-known light-transmitting salts in place of metal (pages 3a-5a of Appendix to Petition for Writ of Certiorari, etc.). On these facts stated and accepted by the Court below, it held that "had the case come up for decision within twenty, or perhaps, twenty-five years before the Act of 1952 went into effect on January 1, 1953, it is almost certain that the claims would have been held invalid" (page 11a *id.*).

The Court below, to save Respondent's patent, construed Section 103 in an unrealistic way as a "codification" of only the earlier decisions of from twenty-five to one hundred years ago, and not of "existing law" as held in the decisions directly to the contrary in the Ninth Circuit and other Circuits (see above and pp. 16 and 17 of the Petition for Writ of Certiorari, etc.)*.

3. The Decision Below as to Retroactivity Has Been Relied on by the Court of Appeals for the Seventh Circuit and Is in Conflict with Other Circuits.

Section 4(a) of the Enacting Statute made the Patent Act effective from January 1, 1953 and provides "It shall apply to unexpired patents granted prior to such date except as otherwise provided". The exceptions include Section 5, which enumerates the repealed sections of the prior patent laws and provides that "Any rights or liabilities now existing under such sections or parts thereof shall not be affected by this repeal". See page 7 of Petition for Writ of Certiorari, etc.

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*For example, in *General Motors Corporation* v. *Estate Stove Co.* (C. A. 6; 1953), 203 F. 2d 912, Cert. den. 346 U. S. 822), the Court there ruled that the 1952 Act "did not provide a new test differing from that which has been generally followed * * *" (p. 915).

The Court of Appeals for the Seventh Circuit in *Hazeltine Research, Inc.* v. *Avco Manufacturing Corp. et al.* (decided Oct. 31, 1955), 107 USPQ 187*, and citing Section 4 (a) and the decision below, without referring to or considering Section 5, gave retroactive effect to the Patent Act of 1952.

This recent decision of the Court of Appeals of the Seventh Circuit and the decision below are in direct conflict with decisions in the Sixth Circuit and the Fifth Circuit. In *General Motors Corporation* v. *Estate Stove Co., supra,* the Court of Appeals for the Sixth Circuit cited and relied upon the earlier decision of the Fifth Circuit by stating and holding, at page 917, as follows:

> "We are of the opinion that the new Act does not apply to our adjudication of this case. In Texas-Miller Hat Corp. v. Switzer Bros. Inc., 5 Cir., 201 F. 2d 824, 825, where the court of appeals reversed the district court's holding of validity and infringement in a case tried before the effective date of the new Act, it was said:
>
> > " 'The newly enacted Patent Codification Act did not go into effect until Jan. 1, 1953, and has no application to the present case. See last sentence of the new act, Sec. 5, which preserved existing rights under repealed sections.' "

In *Diebold, Inc.* v. *Record Files* (D. C. N. D. Ohio, E. D.; 1953), 114 F. Supp. 375, 376, the Court stated and held:

> "The application of the Patent Codification Act to pending suits and suits on unexpired patents instituted after January 1, 1953, its effective date, must depend upon the particular section of the Act invoked and whether the facts giving rise to a new claim or defense under the Act occurred after its effective date. * * * The constitutional principle of due process prohibits the retroactive application of the new statute and a resulting invalidation of the plaintiff's patent claims."

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*Not yet officially reported.

See also *Hartley Pen Co.* v. *Lindy Pen Co.* (D. C. S. D. Cal.; 1954) 16 F. R. D. 141, 145.

The writer of the opinion below, Judge Learned Hand, before the Senate Sub-Committee, recognized the presence of the constitutional issue involved in giving Section 103, *as the Court below interpreted it*, a retroactive effect, and conceded the distinct possibility that the decision below might well be wrong and added (see p. 5a of the Appendix):

> "Well, perhaps, we were wrong. I await the final wisdom on that. We say no, no. 'You took a chance when you infringed that claim. What the test would be of invention. That had not any of the certainties on which you might rely which is back of the taking of property without due process.'
>
> "I await with great interest what the result will be, what it eventually will be on that subject."*

The decisions of the Second and Seventh Circuits are in direct and confusing conflict with the above decisions of the Fifth and Sixth Circuits and of the District Court in the Ninth Circuit on the important question of retroactivity of the Patent Act of 1952. These decisions raise the further important question of whether or not the effect of the decision below and that of the Seventh Circuit is an unconstitutional denial of due process requiring settlement and correction by this Court.

4. Nothing in the Legislative History Supports the Decision Below.

The legislative history of Section 103 shows that Congress did not intend to change the standard of invention as

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*In this connection it should be noted the decision below first holds that under the existing law prior to the Act the patent would almost certainly have been held invalid and then thereafter inconsistently denies the right of petitioner and other defendants, in pending and prospective actions on expired patents, issued prior to the effective date of the Act, to a similar appraisal of and reliance upon that existing law by awarding damages *ex post facto*.

it had been defined by the decisions in this Court at the time of the passage of the Act. Indeed the decision below acknowledged that this Court has never "substituted any other definite test" than that established in *Hotchkiss* v. *Greenwood, supra,* and recognized and applied again in *Cuno Engineering Corp.* v. *Automatic Devices Corp.,* 314 U. S. 84, 91.

The reports of the Committees on the Judiciary of the Senate and the House contained identical descriptions of Section 103 of the bill (H. R. 7794) which became the Act, the pertinent portions of said reports reading as follows:

> "Section 103, for the first time in our statute, provides a condition which exists in the law and has existed for more than 100 years, but only by reason of decisions of the court. An invention which has been made, and which is new in the sense that the same thing has not been made before, may still not be patentable if the difference between the new thing and what was known before is not considered sufficiently great to warrant a patent. That has been expressed in a large variety of ways in decisions of the courts and in writings. Section 103 states this requirement in the title. It refers to the difference between the subject matter sought to be patented and the prior art, meaning what was known before as described in section 102. If this difference is such that the subject matter as a whole would have been obvious at the time to a person skilled in the art, then the subject matter cannot be patented.
>
> "That provision paraphrases language which has often been used in decisions of the courts, and the section is added to the statute for uniformity and definiteness. This section should have a stabilizing effect and minimize great departures which have appeared in some cases."

The revision notes in the appendix to both reports state, as to Section 103:

> "There is no provision corresponding to the first sentence explicitly stated in the present statutes, but

> the refusal of patents by the Patent Office, and the holding of patents invalid by the courts, on the ground of lack of invention or lack of patentable novelty has been followed since at least as early as 1850. This paragraph is added with the view that an explicit statement in the statute may have some stabilizing effect, and also to serve as a basis for the addition at a later time of some criteria which may be worked out."

The decisions, such as, for example, *General Motors Corp.* v. *Estate Stove Co., supra,* and others cited at pages 16 and 17 of the Petition for a Writ of Certiorari, reviewed the legislative history, noting the sections of the report and revision quoted above, and directly held that the Patent Act of 1952 provided no new test differing from that which had been applied just prior to the effective date of the Act.

5. The Standard of Invention Is a Constitutional Standard.

The power of Congress to enact laws relating to patents is derived from the Constitution.* The standard of invention has been termed a constitutional standard. *Great Atlantic & Pacific Tea Co.* v. *Supermarket Equipment Corp.* (1950), 340 U. S. 147, 154-6; see also *Cuno Engineering Corp.* v. *Automatic Devices Corp.,* 314 U. S. 84, 91; *Morton Salt Co.* v. *G. S. Suppiger Co.,* 314 U. S. 488, 492; *Mercoid Corp.* v. *Mid-Continent Investment Co.,* 320 U. S. 661, 665.

In the Fifth Circuit the Court of Appeals had held Section 103 had not changed the standard of invention in *Fritz W. Glitsch & Sons* v. *Wyatt Metal & Boiler Works* (1955), 106 USPQ 162, 164-5. In line with that decision the District Court of that Circuit in *Seismograph Service Corporation* v. *Offshore Raydist, Inc.,* 107 USPQ 104, 110 (D. C. E. D. La., 1955—not yet officially reported), held as follows, citing in support the *A. & P. case* (340 U. S. 147, 154-6; 1950):

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*Art. 1, sec. 8. "The Congress shall have power . . . To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

"This standard of patentability is apparently an effort to state in statutory form what the Supreme Court has held in many cases [citing both recent and earlier decisions]. If it is an effort, as has been suggested [citing *Lyon* v. *Bausch & Lomb*, 2 Cir., June 20, 1955, 106 USPQ 1], to reduce the standard of invention as recognized by the Supreme Court, then that effort must fail for the reason that the Supreme Court is the final authority on the constitutional standard of patentability."

CONCLUSION

The decision below has created widespread interest and has created confusingly conflicting standards of invention and conflicting decisions as to the retroactivity of the Patent Act of 1952 among the different circuits. This confusion and conflict on one of the most important issues in patent law will inevitably grow unless settled now by this Court.

For the reasons set forth above and in the Petition for Writ of Certiorari, it is respectfully urged that rehearing be granted and that, upon such rehearing, a Writ of Certiorari issue to the Court of Appeals for the Second Circuit limited with respect to Questions 1 and 2.

Respectfully submitted,

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Counsel for Petitioner

EDWARD H. CUMPSTON,
711 Wilder Building,
Rochester 14, New York
Attorney for Petitioner.

JOHN N. COOPER,
233 Broadway,
New York 7, N. Y.

G. A. ELLESTAD,
635 St. Paul Street,
Rochester 2, N. Y.
Of Counsel.

Certificate of Counsel

I hereby certify that the foregoing Petition for Rehearing is presented in good faith and not for delay and is restricted to grounds specified in Rule 58(a).

Respectfully submitted,

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Counsel for Petitioner

APPENDIX

Excerpts from Proceedings before the United States Senate Sub-Committee on Patents, Trademarks and Copyrights of the Committee on the Judiciary

[163] Tuesday October 11, 1955

United States Senate,

Subcommittee on Patents, Trade-Marks and Copyrights, of the Committee on the Judiciary,

Washington, D. C.

The subcommittee met, pursuant to recess at 10:15 o'clock a. m., in Room 318, Senate Office Building, Senator Joseph C. O'Mahoney (chairman of the subcommittee) presiding.

Present: Senator O'Mahoney (presiding).

Also present: Robert C. Watson, Commissioner, and P. J. Federico, Chief Examiner, United States Patent Office; Julian Caplan, Counsel, and John Stedman, Associate Counsel.

* * * * * *

[234] AFTERNOON SESSION

2:00 P. M.

Senator O'Mahoney. We are going to have the great privilege of having the testimony this afternoon of one of the greatest judicial minds of certainly my generation and though Judge Hand was good enough to call me young man this noon, I have viewed a good part of the generation in which he has lived from the cradle, not yet to the grave.

We are happy indeed, Judge Hand to have you here. I wish I could properly summarize the testimony which has been given in what amounts to an open forum. We have invited every participant to speak his mind freely, to interrupt when he felt he had something worthwhile to present

by way of interruption in order that we may lay out upon the table here as fully and frankly as possible the problem of patents in the modern world.

We have had suggestions that Congress should make bigger and better appropriations to maintain the Patent Office, suggestions that there should be improvements in the administration of the Patent Office. More serious suggestions have come to the effect that the small investor is now pitted against an organized antagonist, which it is difficult for him to contend with, namely the organized research labs and the great corporations which play so large a part in the modern economic scene. But the Patent Office, the Congress, the Corporations, the research labs, have not been alone in the [235] criticism which has been suggested here. Even the courts have been criticized and it has been said by several of our participants that what the patent needs above all things is a more definite and rigid, perhaps rigid, but at any rate a more definite and clear definition of what an invention is.

The suggestion has been made that until that definition is presented in statutory form, the Supreme Court will be the judge of whether or not any discovery is patentable and that because the court has been showing a tendency to hold patents invalid, something ought to be done but nobody has spoken definitely about what that something should be.

We are hoping that out of your long experience and your very lucid decisions, you may make some contributions to us that will raise the curtain so to speak and help us to gear the patent law to the modern world.

* * * * * *

[244] Judge Hand * * * You know the difference formally the courts have described, substantially the same means producing substantially the same result. I don't think that would be an objection. At least it would avoid a great deal of the animosity that has surrounded patents nearly always.

I suppose it was the feeling of that which made the Supreme Court in whatever it was, 1955—you know when it was.

Mr. Caplan. Hotchkiss versus Greenwood.

Mr. Federico. 1950 [sic. 1850].

Judge Hand. I suppose that was what lay behind the construction of the old rule that it had to be more than use. It was entirely judge-made. There was not a syllable in the statute at that time. Some of the syllables have come into the statute recently but we don't know yet quite what they mean.

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[254] Senator O'Mahoney. Mr. Caplan, would you care to take up the questioning at this point? I know well enough to stop questioning when I have a favorable answer.

Mr. Caplan. You put me in a terrible spot.

Well, we were interested, Judge Hand, in your recent decision as to the effect of the codification act upon the standard of invention.

Judge Hand. You mean Lyons against Bausch and Lomb?

Mr. Caplan. Yes.

Judge Hand. I was interested too.

Mr. Caplan. I appreciate the fact of your limitations upon your commenting upon that case.

Judge Hand. All right, the comment on it now is it is done. It is in the hands of higher powers.

Mr. Caplan. The particular sentence was the statement [255] that "On the other hand it must be owned that had the case come up for decision within 20 or perhaps 25 years before the Act of 1952 went into effect on January 1, 1953, it is almost certain that the claims would have been held invalid." I wonder if you had any comment upon that tendency in the last 20 to 25 years?

Judge Hand. Yes. We have been pretty frank about that in the Second circuit. You will see a lot of cases there that

I dug up or my law clerk did. I read them after he did. It was pretty well accepted, I think, that perhaps 20 or 30 years ago was not the right time but it is about that, that the court, the Supreme Court had adopted a very much stiffer rule about what was invention. I think it began first with Justice Brandeis. He was quite set against patents.

It seems to me it was in the carbon dioxide case. I think I was in the case. Judge Swan wrote the opinion. I should think that was all of 20 years ago. It might be more. That was the first sign as we understood that we should watch our steps and be more severe about what was an invention.

As it went on, we thought in the Second Circuit that that tendency was becoming more and more fixed and although I think or a good many people thought before that we were much too easy about patents, after all we were there to take our orders as we understood them and we understood that we were to be very strict, very severe.

[256] There was a case I know about the making of molding silver. The Jorgenson case. I wrote the decision and it was affirmed. And Justice Jackson said now the only patent that can be said to be good is one that has not reached this court. I thought that showed at least he thought we had fairly well interpreted the Supreme Court. People have said we don't go to you any more because you are so tough on patents. You used to be a friend of patents and now you are perfectly terrible. But we were doing what we thought our orders were.

Now when the Congress passed the Act, whether we were right in construing it as meaning that old rules were to apply, remains to be seen. I hope the case will go up.

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[283] Senator O'Mahoney. Thank you, Mr. Levy. Mr. Robertson has another question. I think that this will be the last one that we will propound to you, so that you may catch your train.

Mr. Robertson. I was concerned with the difficulty of getting the courts to effectuate what I think was a congressional [284] intent under Section 103 to go back to or at least towards the old standard of invention.

When the courts first had Section 103 to interpret they had cases before them which had begun before the act came into force.

Very often they have cases in which the defendant began his practice before the new act came into force.

I am wondering if you feel that it would help the courts accept the changed standard of invention if Congress should provide for something in the nature of intervening rights to protect the defendants who began their activity prior to the effective date of act?

Judge Hand. Well, it so happens in a case that was in our circuit, called Lard vs. Bausch & Lomb, I wrote the opinion where we dealt with that question, and it was argued by the defense very strongly that this is practically taking my liberty without due process of law because, "I had reckoned on the strictness of the old doctrine which you say was changed." That is what they are saying to me. And to which we said, "Yes. The Supreme Court has actually changed it."

And they say, "You cannot take away my reasonable interpretations of the old law by changes ex post facto."

Well, perhaps, we were wrong. I await the final wisdom on that. We say no, no. "You took a chance when you infringed that claim. What the test would be of invention. That had not [285] any of the certainties on which you might rely which is back of the taking of property without due process."

I await with great interest what the result will be, what it eventually will be on that subject.

Senator O'Mahoney. Judge Hand, it is now 3:41. I regretfully excuse you from the witness stand. We are very grateful to you.

Judge Hand. Thank you very much. It has been very fine.

Senator O'Mahoney. If you would see fit to write a paper to us, we would very much be indebted to you.

Judge Hand. I do not believe I could do that. If I came back and said that I promised to write a paper there would be trouble at home. (Applause.)

Senator O'Mahoney. Mr. Bruninga, will you proceed now? I am sorry to have interrupted you. However, you were not dealing with what the judge had said.

Mr. Bruninga. There was one question that I did want to ask the judge. What are you going to do about those Supreme Court decisions in spite of Section 103?

It seems to me there has to be a distinct amendment to the patent statute to wipe out those Supreme Court decisions. I am talking right point blank.

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IN THE

Supreme Court of the United States

OCTOBER TERM, 1955

BAUSCH & LOMB OPTICAL CO.,
Petitioner,

v.

DEAN A. LYON,
Respondent.

No. 379

SUPPLEMENT TO PETITION FOR REHEARING OF ORDER DENYING WRIT OF CERTIORARI

Permission is requested to file this supplement to the Petition for Rehearing filed on or about December 29, 1955, in order to include consideration of an intervening editorial comment on the decision below. The comment entitled "1952 Patent Act Held To Change Standard of Invention" appears in the Columbia Law Review, Vol. 55, No. 8, December, 1955 commencing at page 1231. This issue was received after the filing of the Petition for Rehearing.

This comment is relied on as further showing not only the widespread interest in the decision below but the conflict of the decision below with the courts of appeals of other circuits and the resulting confusion in applying the 1952 Act to all unexpired patents, both as regards the proper standard of invention to be employed and the retroactive effect of the Act.

After statement of the case, the Law Review commented on the decision below as follows (pp. 1233-4):

"In the instant case, the court recognized that the process would have been held to lack invention had the case arisen immediately prior to 1952. On the other hand, invention would have been found, the court stated, if the process had been in question in the years before the Supreme Court adopted its more demanding requirements. The court reasoned that a statute should not be interpreted under the assumption that no change was intended unless it clearly appears to be a codification of existing law. In the court's view the latter possibility was negated in the instant statute by section 4(a) which states that the act is to apply retroactively to patents previously granted.[13] The court reasoned that there would have been no need to include section 4(a) in the absence of an intent to change. Finding additional support in the statement by the Revisor,[14] the court felt compelled to take the statute as it read and held that by incorporating this original Supreme Court test in the statute Congress had intended to restore the law to what it was when the standard was first originated.

"Although no specific legislative intent is clear, it would seem that the act was not intended to be solely a codification of existing law.[15] The retroactivity argument supports this proposition although it does seem to be overly relied upon by the instant court; specific changes in the law were made,[16] and it cannot be said with any certainty that section 4(a) was not intended to apply solely to those changes. Nevertheless, the over-all view of the instant court is reasonable. Since the act is not solely a codification, it was proper for the court to invoke the rules of statutory interpretation to discover its meaning.

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[13]66 STAT. 815 (1952).

[14]See note 12 *supra*.

[15]See H.R. REP. No. 1923, 82d Cong., 2d Sess. 1 (1952); 98 CONG. REC. 9323 (1952).

[16]See, *e.g.* 35 U.S.C. § 271 (1952).

"The hearings on the act show that Congress was dissatisfied with the attitude of the Supreme Court toward patents,[17] thereby indicating that Congress did not desire to continue the Court's interpretation of the standard of invention. The Revisor's note quoted by the instant court supports the view that a fresh start was intended.[18] While there is no direct legislative support for the instant court's return to the 1850 interpretation, the choice was a reasonable one. There was no clear intermediate point at which the court could have rested, and the Revisor's note indicates that Congress certainly did not intend to adopt a greater liberality than that of the Patent Office.[19] It was, therefore, probably best to take the plain meaning of the statutory standard with the attitude of its originators as a guide.

"In spite of the hope expressed by the Revisor the new standard of invention has not been helpful in clarifying the law. It appears to have caused even more confusion than existed previously since no other court has agreed with the instant court in its interpretation.[20] Congress should make its position clear, basing its establishment of a definite standard of invention on an evaluation of the relevant policy considerations. A strict standard might affect incentive and cause an inventor to choose secrecy rather than a patent. On the other hand, a lenient standard might make it possible for a corporation to build a pyramid of patents based upon

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[17]See *Hearings Before Subcommittee No. 3 of the House Committee on the Judiciary on H.R. 3760*, 82nd Cong., 1st Sess., ser. 9, at 134-35.

[18]See note 12 *supra*.

[19]*Ibid.*

[20]*E.g.*, Stanley Works v. Rockwell Mfg. Co., 203 F.2d 846, 849 (3d Cir. 1953) (dictum); General Motors Corp. v. Estate Store Co., 203 F.2d 912, 915 (6th Cir. 1953) (dictum); Gagnier Fibre Products Co. v. Fourslides, Inc., 112 F. Supp. 926 (E.D. Mich. 1953); Thys Co. v. Oeste, 111 F. Supp. 665 (N.D. Cal. 1953), *aff'd per curiam*, 219 F.2d 131 (9th Cir. 1955)."

the development of a single basic process and thereby maintain exclusive control of the field."

Respectfully submitted,

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Attorney for Petitioner

EDWARD H. CUMPSTON,
711 Wilder Building,
Rochester 14, New York

JOHN N. COOPER,
233 Broadway,
New York 7, N. Y.

G. A. ELLESTAD,
635 St. Paul Street,
Rochester 2, N. Y.
Of Counsel.

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I hereby certify that the foregoing is presented in good faith and not for delay and is restricted to grounds specified in Rule 58(a).

Respectfully submitted,

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Attorney for Petitioner